OUR NAVY AT WAR

By

JOSEPHUS DANIELS

SECRETARY OF THE NAVY 1913 TO 1921

Illustrated by Reproductions of Original and Official Photographs

¶ On April 2nd, 1917, not a single order had to be given to pass the United States Navy from a peace to a war basis. Five minutes after President Wilson signed the resolution the message of war was received by the Atlantic and Pacific Fleets. Radio and cable carried it to Panama, Honolulu and the Asiatic. By the time the extras were on the street the United States Navy was ready for war.

¶ The transportation of more than a million men across the Atlantic without a single loss of life appeared to be a miracle. It was not. It was the logical result of an organization brought to the top pitch of efficiency. It was in 1916 that Admiral Dewey said, "I have been in the Navy since 1854 and both in material and personnel we are more efficient today than ever before."

¶ The work of the years that followed proved the worth and power of that efficiency. It is the well-oiled wheel that makes no noise and receives no attention. For the people of the United States therefore Mr. Daniels, formerly Secretary of the Navy, has recorded the great achievement of their Navy in the World War.

GEORGE H. DORAN COMPANY *Publishers* New York

By

William Oliver Stevens
and **Allan Westcott**
Professors in the United States Naval Academy

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—Rear Adm. Bradley A. Fiske, U.S.N.
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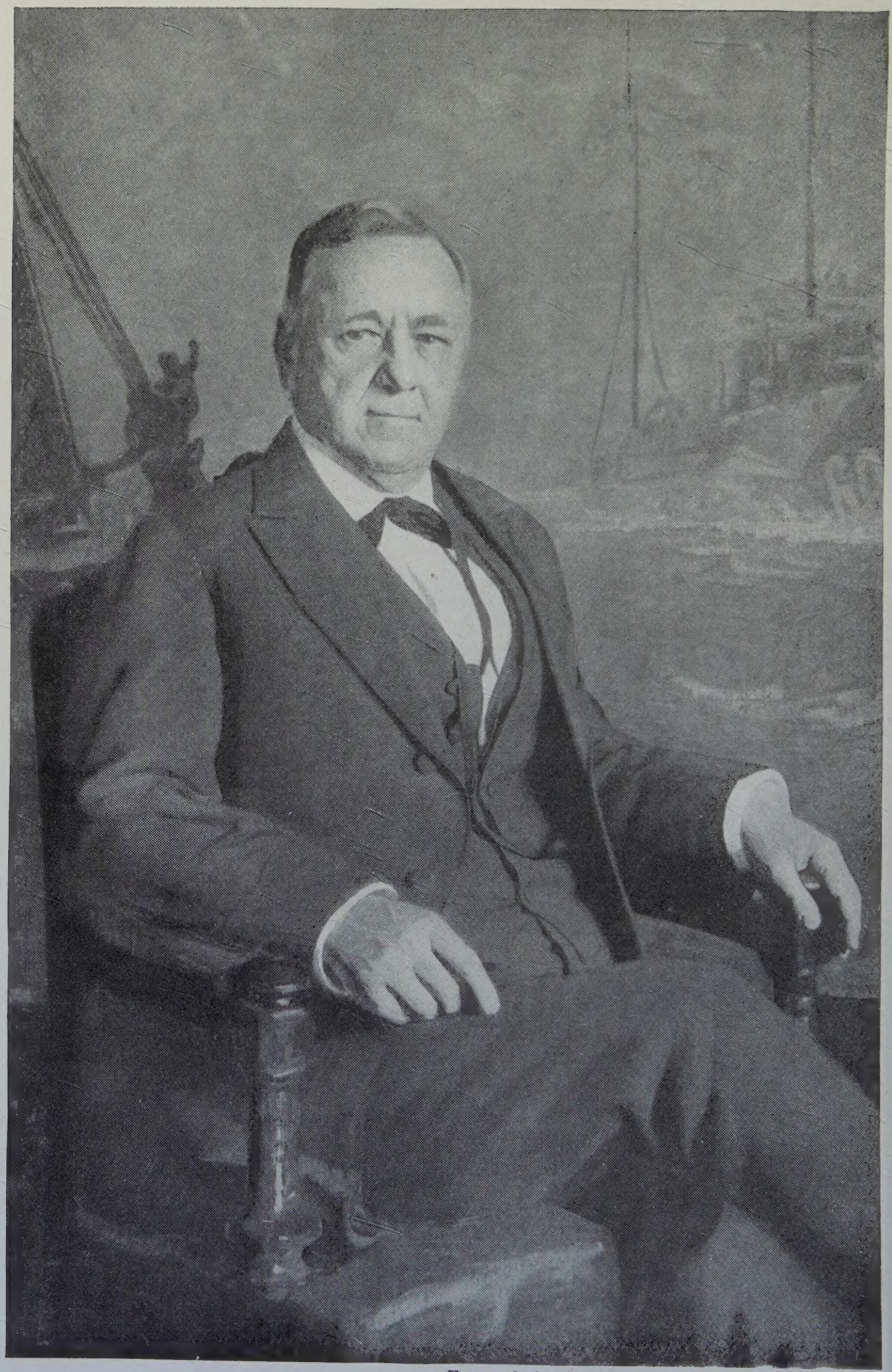

From painting in Navy Department by R. S. Meryman

Sincerely

Josephus Daniels

U6D4
1922

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JOSEPHUS DANIELS

SECRETARY OF THE NAVY
1913 TO 1921

ILLUSTRATED WITH REPRODUCTIONS OF
ORIGINAL AND OFFICIAL PHOTOGRAPHS

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To the Six Hundred Thousand Men

Who Served in the United States Navy and Marine Corps in the World War

Manning more than two thousand vessels—
Operating with Allied Navies from the
Arctic to the Adriatic—
Transporting troops and supplies across the Atlantic—
Protecting ships from attack and destruction—
Driving off and defeating the murderous submarines,
You made safe the seas, and
Kept open the Road to France, so that,
Of all the vast Army sent overseas,
Not one soldier on an American troop-ship
Lost his life on the way to France.

Fighting with the Army, your comrades,
The Soldiers of the Sea, won fame in
Hard-fought battles that saved Paris,
Drove back the German hordes, and
Won for Humanity Complete and Glorious Victory.

In recognition of your splendid service, your dauntless deeds, this work is dedicated by one who was sometime your commander and always your shipmate.

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Josephus Daniels ..... *Frontispiece*

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Our Navy at War

CHAPTER I

WHEN THE WAR CALL CAME

NEWS FLASHED TO SHIPS AND STATIONS FIVE MINUTES AFTER PRESIDENT SIGNED DECLARATION—ENTIRE NAVY MOBILIZED AT ONCE—FLEET, ON WAR BASIS SINCE BREAK WITH GERMANY, WAS AT YORKTOWN—"IN BEST STATE OF PREPAREDNESS IT HAD EVER BEEN," ADMIRAL MAYO SAID—OFFICERS AND MEN EAGER FOR ACTION.

FIVE minutes after President Wilson signed the war resolution passed by Congress April 6, 1917, the Navy's radio operators were flashing this message to every ship and station:

Sixteen Alnav. The President has signed act of Congress which declares a state of war exists between the United States and Germany. Acknowledge. 131106. SECNAV.

That dispatch had been prepared hours before. Radio and telegraph operators were at their keys waiting for the word to "let it go." Lieutenant Commander Byron McCandless, my naval aide, was waiting in the executive office at the White House. Lieutenant Commander Royal Ingersoll was stationed at the Navy Department, across the street, watching for the signal. The moment the President appended his signature, McCandless rushed out and wigwagged that the resolution had been signed. Ingersoll dashed down the corridor to the Communication office, and ordered the operators to start the "alnav" (all navy) dispatch.

Flashed from the towers at Arlington, in a few minutes it was received by the Atlantic and Pacific fleets, by vessels and stations all along the coast. By radio, telegraph and cable, the

message was carried to Panama, across the Pacific to Honolulu, the Philippines, to the vessels on the Asiatic station. By the time the newspaper "extras" were on the street, the naval forces had received notice that we were at war.

The fleet was mobilized that afternoon by the following telegram to the five flagships:

U. S. S. Pennsylvania
U. S. S. Minnesota
U. S. S. Seattle
U. S. S. Columbia
U. S. S. Vestal

Flag Sigcode. Mobilize for war in accordance Department's confidential mobilization plan of March 21. Particular attention invited paragraphs six and eight. Acknowledge.

JOSEPHUS DANIELS.

[Paragraph 6 assigned the rendezvous of the various forces, and paragraph 8 contained instructions with regard to vessels fitting out at navy yards.]

When this message was received by the Atlantic Fleet, at 1:33 p. m., Admiral Henry T. Mayo, Commander-in-Chief, hoisted on his flagship, the *Pennsylvania,* the signal, "War has commenced." At 5:50 o'clock he received the mobilization order, for which officers and vessels were so well prepared that Admiral Mayo said he did not have to "give a single order of any kind or description to pass the Fleet from a peace to a war basis." The entire Navy—Department, Fleet, yards and stations—was on a war footing within a few hours after war was declared. Complete instructions and plans, brought up to date, had been issued two weeks previous, and mobilization was completed without an hour's delay.

The Fleet was at its secret rendezvous "Base 2," to which it had sailed from Hampton Roads on April 3, the day after President Wilson delivered his war message to Congress. "Base 2" was Yorktown, Va., one of the most historic spots in America, and our battleships were in sight of the place where Cornwallis surrendered to George Washington. They rode at anchor in the waters where the timely arrival of De Grasse's ships assured the success of the war for American independence.

In those waters, first made historic in naval annals by the presence of the French ships sent to aid the struggling colonists in the crucial days of 1781, the American Navy was making ready to repay that invaluable assistance—to send its vessels to the beleaguered French coast, both to safeguard the vast army America would send to France and to drive back the onrushing enemies that threatened its life. In 1917 the York and the Chesapeake were again the rendezvous of fighting men of the same mettle as those of 1781, who were to strengthen by united service and common sacrifice in the World War the bonds of friendship between France and America that had been forged more than a century before.

And those who fought each other then were comrades now. "Old wars forgot," Great Britain and France for years had held the lines, and America was taking its place beside them, throwing all its power and strength with them against the common foe. From Yorktown went the first United States forces, ordered overseas just after war began. Sent to England's aid, to serve with the British forces, their arrival was hailed as the beginning of a new era in the relations of the nations—the "Return of the Mayflower." And later went huge dreadnaughts to the North Sea, joining the Grand Fleet in the mightiest aggregation of naval power the world has ever seen.

That is a wonderful harbor, there in the York River, with water deep enough for the largest battleship, and broad enough to accommodate a whole fleet. With defenses at the entrance to Chesapeake Bay, and nets, mines and patrol across York River, no submarine could ever hope to penetrate to this safe haven.

"When the active fleet arrived in Hampton Roads about the 1st of April, after its training period in Cuban waters, it was in the best state of preparedness that it had ever been," said Admiral Mayo, "and there was a feeling of confidence in the personnel of being able to cope with any emergency."

"At the end of March, 1917, when we were on the verge of entry into the war," said Rear Admiral Charles P. Plunkett, Director of Gunnery Exercises, "the gunnery was in the highest state of efficiency that it has been in the history of the American Navy."

When the break with Germany came the fleet was in Cuban waters, engaged in target practice, engineering exercises, and battle maneuvers. This intensive training had been going on under regular schedule for more than two years. Every man in the fleet, from the Commander-in-Chief to the youngest recruit, felt in his bones that the maneuvers that spring were a real preparation for war. Eager to get a chance at the Germans, confident that they could defeat any force of similar strength and tonnage afloat; they were just waiting for the word "Go!"

Is there such a thing as mental telepathy? Would you call it that or a mere coincidence, if the same thought at almost the same moment came to the Admiral of the Fleet at Guantanamo and to the Chief of Naval Operations in Washington? That is exactly what occurred on February 4, 1917. And the two dispatches stating the same conclusions in regard to moving the fleet were en route at the same time.

At 3:59 o'clock that afternoon Admiral Mayo sent this message from his flagship at Guantanamo:

> Unless instructions are received to the contrary, propose to shift fleet base to Gulf of Guacanayabo after spotting practice February 5th; then proceed with schedule of all gunnery exercises.

Before that message reached Washington, in fact in less than ten minutes after it was handed to the operator in Cuba, the following to Admiral Mayo from Admiral William S. Benson, Chief of Operations, was being sent from the Department:

> Position of fleet well known to everybody. If considered advisable on account of submarines, shift base to Gulf of Guacanayabo or elsewhere at discretion. Inform Department confidentially.

The first duty was protection of the Fleet from submarine attack. Four months before the U-53 had called at Newport, and sallying forth, had sunk British vessels just off our coast. On January 16th a Japanese steamer, the *Hudson Maru,* captured by Germans, a prize crew placed on board, had put into Pernambuco with 287 survivors from half a dozen vessels sunk by a German raider. That raider, as was learned later, was the famous *Moewe,* which captured twenty-six vessels, sink-

ing all except the *Hudson Maru* and the *Yarrowdale,* which carried several hundred prisoners to Germany, among them fifty-nine American sailors.

The Germans could easily send their U-boats across the Atlantic. There was a possibility that they might strike quickly without warning. Naval strategists do not yet understand why Germany did not make an immediate dash against our coasts in the spring of 1917, instead of waiting until 1918. Allied and American officers alike expected the submarines to extend their operations to this side of the Atlantic when this country entered the war. It was necessary to provide for the fleet a rendezvous with which the Germans were not familiar, one easily defended, where battleships could carry on their work free from attack until the time came to bring them into action. But why Guacanayabo?

Though you would hardly notice it on the average map, the Gulf of Guacanayabo is a sizeable body of water, extending in a sort of semicircle some seventy miles, the broadest part about fifteen miles wide. On the southern coast of Cuba, it extends from Santa Cruz del Sur to below Manzanillo, nearly to Cape Cruz. With plenty of deep water inside, once the main channel is closed, only a navigator familiar with the turnings and depths can navigate safely through the other channels, for the Gulf is surrounded by a chain of islands, with many shoals. Difficult for submarines to negotiate submerged, it is easily defended against them.

When Admiral Mayo had placed his ships in this landlocked harbor, shut the door and turned the key, they were as safe as my lady's jewels in a safety deposit vault. At Guacanayabo the fleet continued its work, going out to sea for battle practice and long-range gunnery in the daytime, returning at night to conduct night firing with the secondary batteries, torpedo attack, and other exercises. There was even room in the Gulf to carry on torpedo firing and defense at 10,000 yards distance.

There the fleet remained until it was ordered north, on March 20th. "I feel sure that if this force had engaged an enemy on its cruise north in the spring of 1917, the victory would have been ours," said Admiral Henry B. Wilson, commander of the flagship, and Admiral Joseph Strauss, in com-

mand of the *Nevada,* declared: "In April, 1917, we could have gone out in mid-ocean and engaged the German fleet and come out successfully. Our ships were superior; our guns were superior; I believe our morale was superior."

Upon the arrival of the fleet, Yorktown became the center of battle training. During the entire war this base was one of the busiest places in America. Every ship was carrying on intensive training day and night—training gunners, engineers, firemen, deck officers and crews, armed guards for merchant vessels, men of every rank and rating to man transports, destroyers, patrol craft, and all the many vessels put into European and trans-Atlantic service. In addition to new men in their own crews, the special training squadron of older battleships trained more than 45,000 officers and men for service in other vessels.

When the bugle sounded, they all wanted to get into action. They had looked for the declaration of war as the signal to weigh anchor and set sail for Europe. As the destroyers and patrol craft went overseas and the cruisers plunged across the Atlantic escorting troop-ships and convoys, those who were left behind envied those who had received such assignments. But teaching recruits, tame and tiresome as it was, was their job, most necessary and useful. Until they had their heart's desire and were ordered abroad, they stuck to it with the vim and determination with which they afterwards entered upon the U-boat chase. That was the spirit that won.

Three thousand miles across the seas the men on the British Grand Fleet were likewise eating their hearts out because the enemy dreadnaughts, after the one dash at Jutland, were hugging the home ports, denying to Allied naval forces the chance for which all other days had been but preparation. All naval teaching for generations had instilled into American and British youth the doctrine that, whereas battles on land might continue for months, domination of the sea would be lost or won in a few moments when the giant dreadnaughts engaged in a titanic duel. German naval strategy, after the drawn battle at Jutland, defeated all naval experience and expectation. Hiding behind their strong defenses, never venturing forth in force, they imposed the strain and the unexciting watchful waiting which

more than anything else irks men who long to put their mettle to the test by a decisive encounter.

The acme of happiness to the fleets at Yorktown and at Scapa Flow to which all looked, both before and after the American division joined the British Grand Fleet, was a battle royal where skill and courage and modern floating forts would meet the supreme test. It was not to be. The disappointment of both navies was scarcely lessened by the knowledge that they had gained a complete victory through successful methods which a different character of warfare brought into existence. They wished the glorious privilege of sinking the ships in an engagement rather than permitting the Germans later to scuttle them. Admiral Beatty voiced the regret of both navies in his farewell address to his American shipmates, when he said: "I know quite well that you, as well as all of our British comrades, were bitterly disappointed at not being able to give effect to that efficiency you have so well maintained."

The sense of disappointment at the drab ending was heightened by the belief entertained that there had been times when the bold and daring offensive would have compelled a great naval battle. In Germany, fed up for years on the claim of naval superiority and stuffed with fake stories of a great German victory at Jutland, there had been demand that their navy make proof of its worth by giving battle instead of rusting in home ports. Men of the navies that had produced Nelsons, and Farraguts and John Paul Joneses and Deweys grow restive under inaction. They knew that the existence and readiness of the two great fleets and of the French and Italian fleets held the German High Seas Fleet in behind shore protection, rendering impotent the force Von Tirpitz had assured Germany would sink enemy ships. But the dreary program of blockade carried on during four long years was not to their liking. It succeeded, but it was not the finish for which they had trained. They longed to the very end for the real fight, the daring drive, the bringing of their big guns into play, the final combat which could end only with annihilation of the enemy's fleet.

Whatever may be said of the wisdom of the ancient prudent doctrine of "a fleet in being," I shall always believe that, if, at the opportune time, such fighting sailors as Beatty and

Carpenter, Mayo and Rodman and Wilson, could have joined in a combined assault, they would have found a way or made one, to sink the German fleet, in spite of Heligoland and all the frowning German guns.

CHAPTER II

"TO BE STRONG UPON THE SEAS"

PRESIDENT IN 1914 LAID DOWN POLICY WHICH GUIDED THE NAVY IN YEARS OF PREPARATION—ON VERGE OF WAR IN 1916—FLEET PREPARED TO MOBILIZE—"DEUTSCHLAND" AND U-53 WARNED US TO EXPECT SUBMARINES—CONGRESS AUTHORIZED BUILDING OF 157 WARSHIPS—MERCHANT SHIPS LISTED, MUNITIONS ACCUMULATED, COUNTRY'S INDUSTRIES SURVEYED.

"WE shall take leave to be strong upon the seas," declared President Wilson in his annual message to Congress in December, 1914, and this was the guiding policy in the years of preparation that preceded the war. And the two years that followed were the busiest the Navy has ever known in time of peace.

The United States was on the very verge of war a year before it was declared. All preparations were made to mobilize the Fleet when President Wilson, after the sinking of the *Sussex,* sent his ultimatum to Germany declaring:

> Unless the Imperial Government should now immediately declare and effect an abandonment of its present methods of submarine warfare against passenger and freight-carrying vessels, the Government of the United States can have no choice but to sever diplomatic relations with the German Empire altogether.

That note was despatched on April 18, 1916. Germany did not reply promptly and in a few days the following order was issued:

NAVY DEPARTMENT

Washington, April 27, 1916.

CONFIDENTIAL.

From: Chief of Naval Operations.
Subject: Mobilization Plan.

The following order had this day been approved by the Secretary of the Navy:

"1. In case of mobilization for war in the Atlantic the organization of the naval forces will be as indicated in the mobilization sheets published from time to time by the Department.

"2. Plans will be developed by all officers concerned for execution upon the receipt of the order to mobilize.

"3. The order to mobilize when received will be construed as an order to take all necessary action for the rapid assembly of ships at the rendezvous in all respects ready for war service.

"4. The rendezvous is designated as Chesapeake Bay."

Copies of mobilization sheets are forwarded herewith.

All our battleships except three, and 40 of our 47 destroyers were reported immediately available. Mobilization is the next step to actual hostilities and is only justifiable when conditions are extremely threatening. That was the case in the spring of 1916. In fact, what threatened then was what actually occurred a year later.

The German Government in its note of May 4th met all Wilson's demands, declaring it would do its utmost to confine the operations for the rest of the war to the fighting forces of the belligerent. "Guided by this idea," it notified the United States Government that the German naval forces had received the following orders:

In accordance with the general principles of visit and search and destruction of merchant vessels recognized by international law, such vessels, both within and without the area declared as naval war zone, shall not be sunk without warning and without saving human lives, unless such ships attempt to escape or offer resistance.

It was not until Feb. 1, 1917, that Germany repudiated this pledge and resumed ruthless U-boat warfare. But it did give us warning that it could send its undersea craft to American waters whenever it chose.

If there ever had been any fancied security from their submarines, it was removed that Sunday, July 9, 1916, when the *Deutschland* bobbed up in Chesapeake Bay, and a few hours later reached her dock in Baltimore. Coming from Bremen via Heligoland, it had made its way through the North Sea and around Scotland, crossed the ocean and entered Hampton Roads under the very noses of the British cruisers just outside. Two hundred and thirteen feet long, with a displacement, submerged, of 2,200 tons, it had a surface speed of 12 to 14 knots an hour, and could run under water at 7½ knots. Though unarmed, and

called a "mercantile submarine," by the placing of guns and torpedo tubes aboard, she could be quickly converted into a man-of-war. The *Deutschland* came again to America in November, going to New London, Conn., reaching Germany, on her return, December 10. This was her last trip as a merchantman, for she was soon afterwards converted into a warship, and was one of the submarines sent to sink shipping in American waters in 1918.

Even more startling was the visit of the U-53. This German submarine, almost as large as the *Deutschland,* suddenly appeared off Point Judith and calmly steamed into Newport, R. I., the afternoon of October 7th. Flying the German man-of-war ensign, she carried two guns conspicuously placed. The cruiser *Birmingham,* Rear Admiral Albert Gleaves commanding, was near by, and the U-53 asked to be assigned a berth. Kapitän Leutnant Hans Rose, her commander, in full uniform, called on the commandant of the Naval Station, stating that his object in entering the port was to "pay his respects," and that he intended to sail at 6 o'clock. He invited our officers to visit his ship, saying he would be glad to "show them around." The crew seemed anxious to impress the Americans with the boat and its mechanism.

While in port, the U-53 was careful not to violate neutrality regulations, but the day after leaving Newport she began a slaughter of vessels. On October 8th, she sank the British steamships *Stephano, Strathdine* and *West Point,* the Dutch steamer *Blommersdijk,* and the Norwegian *Chr. Knudsen.* The first two were attacked within sight of Nantucket Lightship, just outside the three-mile limit. The others sunk were farther away, but all were near our coast.

The first news we had of this raid was that the American steamer *Kansan* had been stopped early in the morning by a German submarine, which, after examining her papers, had allowed her to proceed. A short time later a radio message was received stating that the British steamer *West Point* was being gunned. After that, distress signals came thick and fast. Rear Admiral Gleaves immediately ordered our destroyers to the relief of the vessels attacked, and they rescued crews and passengers, bringing them safely to port.

Within seven or eight months those destroyers were across the Atlantic, fighting the undersea raiders in European waters. And they had their revenge in September, 1918, when an American destroyer and subchasers bombed the U-53 with such effect that according to reports, she abandoned the fight, glad to be able to get to her home base.

Thus Germany in 1916 gave us a taste of submarine warfare, showing what it could do and did do in American waters in 1918, and what sound strategy caused naval experts to expect it to undertake in the spring of 1917. The U-53 had been careful not to attack any American vessels, and had conducted its operations outside our territorial waters. But this piece of German bravado aroused the indignation of the entire country. It was a warning—and probably so intended—that the Germans could at any time send their U-boats across the seas to sink our vessels off our own shores.

Even then the country at large seemed to regard our entrance into war as improbable, and to the average man it did seem only a remote possibility; but our attaché in Berlin reported that Germany was building U-boats by scores, the parts being made at plants in various parts of the country, and assembled at coast shipyards. The Germans continued to talk peace, but our Navy continued to build ships, enlist men, and accumulate reserves of guns, ammunition, and war materials.

Congress on August 29, 1916, authorized the construction of 157 war vessels—ten battleships of the largest type and six huge battle cruisers, larger and swifter than any then in existence; ten scout cruisers, fifty destroyers, nine fleet submarines, fifty-eight coast submarines and one of the Neff type; three fuel ships, two destroyer tenders, two gunboats and two ammunition ships, a repair ship, a transport, a hospital ship and a submarine tender. Sixty-six vessels were appropriated for, to be begun in the current year. That bill carried total appropriations of $312,678,000, the largest amount ever granted for naval purposes in time of peace, and larger than previous appropriations when this country was actually engaged in war.

Usually, after vessels are authorized, months are required to prepare the plans and specifications. That was not the case this time. The Bureau of Construction and Repair, under the

direction of Rear Admiral David W. Taylor, regarded in this country and abroad as one of the world's ablest naval constructors, had begun work on the plans long before. They were ready when the bill passed Congress. Bids were advertised for the next day, and as soon as the law allowed, contracts were let. Before the end of 1916, we had entered upon the biggest shipbuilding program ever undertaken by any navy at one time.

Providing for an enlisted strength of 74,700 regulars, Congress also authorized the President to increase the Navy to 87,000 in case of emergency. This, with the 6,000 apprentice seamen, the Hospital Corps, and allowance for the sick, prisoners and men on probation, would give us an emergency strength of some 95,000—including both officers and men, a force of over 100,000. Five thousand additional enlisted men and 255 more officers were authorized for the Marine Corps, which could be raised in emergency to 17,500. The increases alone were larger than the entire number of men employed by the Navy in the Spanish War. The Naval Reserve, instituted in 1915, was made a Naval Reserve Force unlimited in numbers.

The Naval Militia had grown to a force of nearly 10,000, and interest had been stimulated by a training cruise for civilians on eleven war vessels, known as the "Ocean Plattsburg." The Act of 1916 laid the basis for the enormous personnel we secured during the war—over half a million men in the Navy, and 75,000 in the Marine Corps. Immediately after its passage, a vigorous recruiting campaign was begun.

Large reserves of powder and shells had been accumulated, but orders were given for much more, and efforts were made to speed up projectiles under manufacture. "We had at the end of 1916," Admiral Strauss, then Chief of the Bureau of Ordnance, stated, "batteries of four guns each for 189 auxiliary ships. These batteries were housed at navy yards, and the full supply of powder, shell, primers, etc., were all prepared and ready for these ships at the nearest ammunition depots, so that in the event of war the guns could be secured on the ships and the magazines and shell-rooms supplied at once."

Equipment for ships to be converted, and spare parts of all kinds were accumulated and stored at points where they would be quickly available. All the bureaus concerned with construc-

tion, shipbuilding, conversion, and repair, engines and machinery, ordnance and supplies were increasing production, reporting, as did our vessels, constant improvement in "readiness for war."

This was the result of two years' constant work. Special duties were imposed from the beginning of the European conflict in 1914. Only a few days after hostilities began, the cruisers *Tennessee* and *North Carolina* sailed, carrying millions of dollars in gold to relieve the thousands of Americans stranded in Europe, unable to get home. Naval vessels were kept busy along our coasts, enforcing neutrality in our territorial waters. Naval censors were placed at wireless stations, preventing the sending of unneutral messages. Intelligence officers were active in thwarting the machinations of German spies and plotters. But all this was small in comparison with the efforts we were making to increase and improve the Navy in its every branch and prepare it for any emergency.

The sinking of the *Lusitania*, May 7, 1915, was followed by such naval activity as had never been seen before, except in the midst of hostilities.

Congress had created in the current naval bill a Chief of Naval Operations, charged with "the operation of the fleet and its readiness for war." For this important position, I had, after careful consideration, selected Rear Admiral William S. Benson, whose ability and experience admirably fitted him for this vital task. He assumed office on May 10, three days after the *Lusitania* went down. It was a critical period. The President on May 13 addressed to Germany his vigorous note giving notice that this Government would omit no word or act to protect its citizens against murder on the seas. Many Americans were urging that war be declared at once. The crisis lasted for weeks, and ended only when the German government gave its promise that non-belligerent vessels would not be sunk without warning.

Admiral Benson, bureau chiefs, commanders, and officials devoted every energy to preparing the fleet for war. Abolition of the cumbersome system of naval aides brought the bureau chiefs in closer touch with the Secretary. There was no longer any division of authority and responsibility, and we could get direct action. On this basis we built up a departmental organi-

zation so efficient that no change was found necessary during the entire war period, the bureaus merely expanding to meet the enormously increased demands, each new activity easily fitting into some part of the existing organization.

The General Board of the Navy, of which Admiral Dewey was the head until his death Jan. 16, 1917, had developed a comprehensive administrative plan, under which each bureau was required to report, periodically, on its readiness for war. This enabled us to keep informed of exact conditions and progress made. The Board also worked out a scheme for development of shore bases and stations.

Navy yards were expanded not only to repair and convert vessels, but to build war-ships of every type. These new ways and shops formed a substantial and valuable addition to the nation's shipbuilding facilities.

I created the Secretary's Advisory Council, consisting of the Assistant Secretary, the Chief of Naval Operations and the chiefs of the various bureaus. Meeting regularly once a week and oftener when necessary, this Council brought together the chief administrative officers of the Department, and discussed all matters of general interest to the service. Thus the heads of bureaus kept in close touch with each other; having the advantage of a General Staff without its many disadvantages.

Comprehensive plans for possible war against Germany—we then called it "war in the Atlantic"—had been made by the General Board, and were constantly corrected and brought up to date in accordance with war developments.

When the fleet was reviewed by President Wilson at New York, May 15, 1915, Admiral Dewey wrote:

> The people of New York have just cause for pride in the fleet now assembled in their harbor. Not only is it composed of the finest and most efficient warships that we have ever had, but it is not excelled, except in size, by the fleet of any nation in the world. Our ships and guns are as good as any in the world; our officers are as good as any; and our enlisted men are superior in training, education, physical development and devotion to duty to those of any other navy. As President of the General Board for the past fifteen years, I can say with absolute confidence that the efficiency of the fleet has steadily progressed, and has never been so high as it is today.

For months we had been at work on a plan for reorganizing the fleet. Completed and put into effect in July, 1915, that plan proved so efficient that it was continued throughout the war. Four battleships, the *Pennsylvania, Nevada, Oklahoma* and *Arizona,* ten destroyers, seven submarines, and two tenders, the *Melville* and the *Bushnell,* were completed in 1915-16.

Battle and target practice were conducted with a constant improvement in gunnery. In August, 1916, there was held off the North Atlantic Coast the largest "war game" in the annals of the Navy. Eighty-three vessels, including twenty-eight battleships and thirteen submarines, engaged in this strategic maneuver, which lasted for four days, and simulated the conditions of a great naval battle.

Congress had, in 1913-14, authorized the construction of five dreadnaughts as compared with only two granted by the previous Congress, and we were building more destroyers and submarines than in previous years. Forty-one more ships were in commission, and there were 5,000 more men in the service than there had been in 1913. The fleet was incomparably stronger than it had ever been before, but we were heartily tired of the hand-to-mouth policy that had prevailed so long, a policy that made it impossible to plan far ahead and develop a consistent and well-balanced fleet. In common with its officers, I wanted the United States to possess a navy equal to any afloat, and to initiate a building program that should be continuous and not haphazard.

Consequently, in July, 1915, I requested Admiral Dewey to have the General Board submit its opinion of what should be done to give us a navy worthy of this country and able to cope with any probable enemy. In response the General Board set forth this policy, which has guided us ever since and is now nearing a triumphant reality:

> The Navy of the United States should ultimately be equal to the most powerful maintained by any other nation of the world. It should be gradually increased to this point by such a rate of development, year by year, as may be permitted by the facilities of the country, but the limit above defined should be attained not later than 1925.

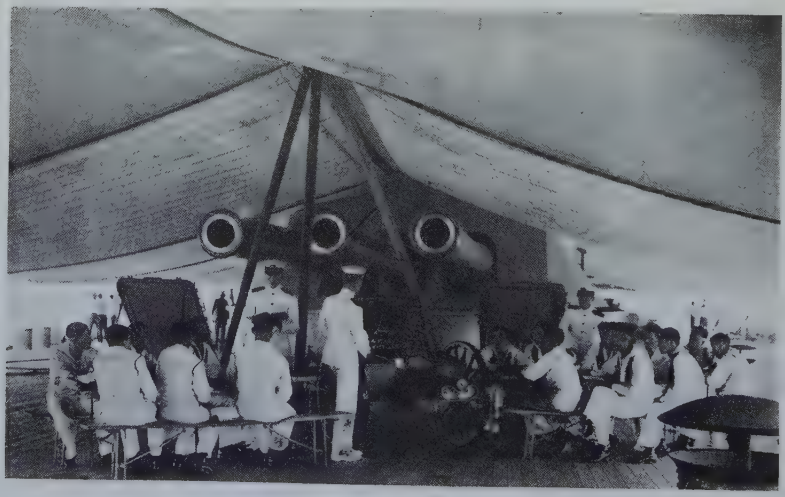
It was in accordance with this policy, and at my direction, that the General Board developed the continuous building pro-

WAR CHIEFS OF THE NAVY, THE SECRETARY AND HIS ADVISORY COUNCIL

Seated—Secretary Daniels. Standing (left to right):—Maj. Gen. George Barnett, Commandant U. S. Marine Corps; Capt. W. C. Watts, Judge Advocate General; Hon. Franklin D. Roosevelt, Assistant Secretary of the Navy; Rear Admiral Samuel McGowan, Paymaster General, Chief of the Bureau of Supplies and Accounts; Rear Admiral Robert S. Griffin, Engineer-in-Chief, Chief of the Bureau of Steam Engineering; Rear Admiral David W. Taylor, Chief Constructor, Chief of the Bureau of Construction and Repair; Admiral William S. Benson, Chief of Naval Operations; Rear Admiral Ralph Earle, Chief of the Bureau of Ordnance; Commander H. G. Sparrow, Naval Aide to the Secretary; Rear Admiral Charles W. Parks, Chief of the Bureau of Yards and Docks; Rear Admiral Leigh C Palmer, Chief of the Bureau of Navigation; Rear Admiral William C. Braisted, Surgeon General, Chief of the Bureau of Medicine and Surgery.

A FRIENDLY BOUT

Spectators on the U. S. S. Bushnell are having as much fun as the boxers.



SCHOOL HOUR ABOARD A BATTLESHIP

gram, comprising 157 war vessels, later known as the "three-year program," which was authorized by Congress in the next naval appropriation act. Presented in my annual report for 1915, it was strongly urged by President Wilson in his message to Congress, and he sounded the keynote in his speech at St. Louis, February 3, 1916, when he declared: "There is no other Navy in the world that has to cover so great an area of defense as the American Navy, and it ought, in my judgment, to be incomparably the most adequate Navy in the world."

With all the Navy striving to build up and expand the service, I turned attention to other forces that might be utilized. War had become a science; inventions were playing a vastly greater part than ever before, and on July 7, 1915, I wrote to Mr. Thomas A. Edison, suggesting the formation of a board of eminent inventors and scientists, and asking if he would consent to become its head. The idea appealed to Mr. Edison, as it did to the various scientific and engineering societies, and in a few weeks the Naval Consulting Board became a reality. Composed of men of eminence and distinction, this was the first of those organizations of patriotic civilians which, when war came, rendered such signal service to the nation.

This board began in 1915 a survey of all the country's industries and resources which might be employed, in case of war, for the production of munitions and supplies, and the thousand and one things required by armies and navies.

The Navy made a survey of all merchant ships and privately owned craft which might be utilized as auxiliaries. The Board of Inspection and Survey was increased, each vessel listed for service to which it could be adapted, and plans made for all the changes needed to convert it to war purposes. This was worked out to the last detail, even to the yards to which the vessels would be sent, and the accumulation of machinery and materials for their conversion. A standardized schedule was developed of all ammunition, materials, equipment and supplies needed by vessels in case of war.

Aviation received earnest attention. Seaplanes and flying boats were secured, and a school and station established at Pensacola, Fla., for the training of aviators. The cruisers *North Carolina, West Virginia,* and *Washington* were fitted with a

launching device, from which aeroplanes could fly from ships. Operating with the fleet, our aeroplanes began developing the tactics of aircraft at sea.

During the *Sussex* crisis, arrangements were made for the mobilization of the communications of the entire United States radio, telegraph and telephone. This important experiment was carried out from May 6 to 8, 1916, and was a complete success, proving that in a day we could link all methods of communication and put in touch all our yards and stations and our ships at sea. Congress had previously authorized the erection of a chain of high power radio stations to span the Pacific—at San Diego, California; Pearl Harbor, Hawaii; and at Cavite, in the Philippines—and these were under construction.

The Naval Communication Service was created and under its direction all our communications, wire and wireless, were prepared for war. This entire service was mobilized the day the United States severed relations with Germany.

Admiral Dewey said, in the autumn of 1916: "The last three years have been wonderful years. I have been in the Navy since 1854, and both in material and personnel, we are more efficient today than ever before." Admiral Charles J. Badger, who, upon the death of Dewey in January, 1917, became head of the General Board, stated: "I do not mean to say that we had attained to perfection in the Navy—we never shall; that no errors of judgment or mistakes were made—they will always occur; but I assert that the Navy when it entered the war was as a whole, well prepared and administered."

CHAPTER III

THE BREAK WITH GERMANY

SURPRISE AND TERROR PLANNED IN STARTING U-BOAT WAR—BERNSTORFF WITHHELD NOTE UNTIL JUST BEFORE SUBMARINES STRUCK—AMERICA'S ENTRANCE COULD NOT AFFECT "TREND OF THE WAR," HOLTZENDORFF INSISTED—FLEET PUT ON WAR BASIS—PLANS MADE TO COOPERATE WITH ALLIES—"GET AND KEEP THE BEST MEN," PRESIDENT TOLD SECRETARIES OF WAR AND NAVY.

GERMANY struck practically without warning in inaugurating ruthless U-boat warfare. Surprise of Allies and neutrals, giving no time for negotiations, was one thing upon which its Admiralty insisted. Terrorizing America was a part of the plan, and if the United States entered the war, the Teuton naval authorities contended that it would exert no marked influence, and could furnish little assistance in troops or vessels.

Admiral von Holtzendorff, head of the German Admiralty, set forth all this in his memorandum detailing the arrangements for the "U-boat war." That document, one of the German official papers made public after the war, is marked "Strictly secret—B-35840-I," and is dated, "Berlin, Dec. 22, 1916."

"The beginning and the declaration of the unrestricted U-boat war," said Holtzendorff, "must follow so quickly one upon the other that there is no time for negotiations, especially between England and the neutrals. The wholesome terror will exercise in this case upon enemy and neutral alike."

The submarines were to begin the general attack not later than February 1, 1917. England was to be starved out in five months, and the Allies forced to surrender by August 1st. This is all stated in that memorandum, and those exact dates are given.

The probable entrance of the United States as a belligerent was discussed, and Holtzendorff took pains to set forth what

little influence this country's participation could have upon the "trend of the war," saying:

> As regards tonnage this influence would be negligible. It is not to be expected that more than a small fraction of the tonnage of the Central Powers lying in America and many other neutral harbors could then be enlisted for the traffic to England. For the far greatest part of this shipping can be damaged in such a way that it cannot sail in the decisive time of the first months. Preparations to this effect have been made. There would also be no crews to be found for them.
>
> Just as little decisive effect can be ascribed to any considerable extent to American troops, which, in the first place, cannot be brought over through lack of tonnage.

Bernstorff, the German Ambassador at Washington, carried out his part of the plans to the letter. It was not until a few hours before the submarines were to strike, late in the afternoon of Jan. 31, 1917, that he presented the note of the German Government to the Secretary of State. He had that note in his possession twelve days before he presented it. He admits that it reached the German Embassy in Washington on January 19, the same day that Zimmermann, the German Foreign Minister, sent to Mexico his crafty but absurd proposal that Mexico form an alliance with Japan, and make war with the United States to recover the "lost territory" of New Mexico, Arizona, and Texas. That proposal also passed through the Washington embassy, in the Berlin diplomatic code, and was read by the Ambassador.

Before he presented the note declaring submarine warfare, Bernstorff had given the order that "the engines of all German ships lying in American harbors were to be destroyed." "I had already given instructions to this effect at the time of the *Sussex* crisis, and these instructions had now been repeated from Berlin," he says in his book. "As a matter of fact it was dangerous to allow of any delay, for on the evening of January 31, our ships were already seized by the American police. As far as I know, however, all of them without exception were made unfit for use before this occurred."

The day ruthless U-boat warfare began, new mobilization plans were prepared and sent out to the entire Navy. Formal action had not then been taken by our Government. Its course

was still under consideration and the Cabinet was to meet the next day. But the moment I read the German note, I regarded a break as inevitable, and active hostilities almost certain to follow.

As the Cabinet assembled on Friday, February 2d, all of us realized the significance of the occasion. Parley and negotiation were ended. The time had come for decisive action. That was the conviction, I believe, of every man who rose to greet the President when he entered the room. Usually genial and smiling at the gatherings of his official family, he was now grave and serious. The destiny of a hundred million people lay in his hands, perhaps the destiny of the world.

The Cabinet members had, of course, read the text of the German note, whose meaning was plain enough, camouflaged as it was in diplomatic terms and pretended concessions. All had studied it, and were familiar with its provisions. But the President read it to us again. He read it in measured tones, giving weight to every significant syllable.

His mind was already made up, I felt certain. But before giving voice to his own decision, he called upon his official advisers to state their views. They spoke freely and frankly, each stating just what he thought the situation demanded. Expressions varied, of course, and each man approached the problem in his own way. There were differences of opinion as to details, but none as to the main point. On that, all were agreed. They felt that relations with Germany must be severed.

This was the President's position. He had never wavered from the firm stand he had taken a year before that, if unrestricted submarine warfare was continued, or resumed, the United States could have no further relations with Germany. It was no surprise to him that his colleagues, to a man, shared his views that the Cabinet was a unit for the dismissal of Bernstorff, and the sharpest possible warning to the German Government.

Although the session lasted several hours, this decision was soon reached. It had required no debate. The German note itself was a compelling argument.

Most of the time was devoted to discussing what steps each department should take, particularly State, War and Navy. It

was recognized thoroughly that the severance of relations would create a difficult situation, one likely in a few weeks at most to lead to open warfare. It was realized that Germany might strike without waiting for formal declaration from the United States. The sinking of American vessels without warning would be, in itself, an overt act, an act of war. We had to prepare for any eventuality, to map out a program for immediate action.

The following telegram was sent to the entire Navy that night:

Six Alnav. In view of the present international situation, take every precaution to protect Government plants and vessels.

All who received that message knew what it meant, that they were to guard against surprise, and be ready for anything that might arise.

The next afternoon at two o'clock, the President, addressing a joint session of the two houses of Congress, pointed out that Germany had "suddenly and without prior intimation of any kind," deliberately withdrawn the solemn assurances given in its note of May 4, 1916, and announced that all diplomatic relations with Germany had been severed.

At the very hour the President began his address, and Bernstorff was handed his passports, Admiral Mayo, in Cuban waters, issued the first campaign order, putting into effect the plan for the defense of the fleet in Guantanamo Bay. As soon as I returned from the Capitol, this order was sent out:

One Alatl. Radicode. Mobilize Naval Communications.

SECNAV.

That placed all our communications—radio, telegraphs, telephones, and signals—on a war basis. This message was just going out by wireless, when I was called to the White House, where I found the Secretary of War, who had likewise been summoned.

The President was concerned about the safety of Government property. There was enough cause for this anxiety, for there were thousands of aliens who could not be interned legally unless or until war was declared. Among them were hostile Germans

who would resort to almost any violence to vent their resentment or to cripple this Government in its manifold preparations for war.

Navy yards and army posts were closed, and orders sent to every naval and military plant in the United States, Porto Rico, the Virgin Islands, Hawaii, Alaska, Guam and the Philippines, to exclude all visitors and strengthen the guards. The guards in the Panama Canal Zone were doubled, and special precautions were taken to protect the canal.

To prevent information from reaching Germans, we stopped publishing the movements of naval vessels and the daily orders to naval officers. Since the outbreak of the war in Europe we had maintained along the coast a number of naval vessels to enforce neutrality regulations. Now this force was increased, and a virtual coast patrol established.

That night I sent out the order, "Alnav availability," which directed all vessels to report their actual readiness for war.

The President kept in close touch with all our preparations. Not satisfied with general reports, he wanted to know just what was being done. Monday afternoon, while I was hard at work with officers on plans and orders, Mr. Wilson suddenly appeared in my office. Glad as I was to see him, his visit was a surprise. Documents concerning a number of the matters we were working upon were on my desk, and in a few moments I reviewed in detail the plans, told him what we had done and were doing, and asked his directions as to certain operations.

Then he suggested that we go to the War Department, to talk matters over with the Secretary of War. Mr. Baker was in his office and the three of us held a long conference, discussing the situation in all its phases. Some things the President said to us are indelibly impressed on my memory.

The breach in diplomatic relations, he pointed out, did not necessarily mean war, but it brought us so close to the possibility that we must put our house in order, and be ready for any emergency.

Men concerned him quite as much as measures, and he inquired particularly about the officers in important positions and commands. If there were any who did not seem equal to the tremendous tasks they would be called upon to perform, he

wanted them replaced. If abler men were available, he wished us to secure them.

"Each of you must surround yourself with the ablest men you have," he said. Turning to me, he asked whether I felt that my immediate advisers, those in the Navy Department and in command afloat, were the men to retain in those positions.

"They are the best men in the Navy," I replied.

He asked the same question of the Secretary of War. Mr. Baker told him that the officers in responsible positions in the War Department and the Army knew their jobs and were going ahead earnestly with them. Some were necessarily slated for early retirement, but to anticipate this, he thought, would be unwise, as it might occasion needless alarm and disturb morale.

The President listened intently to us. When we finished, he again impressed upon us that only the ablest, most alert and energetic officers should be put in places of responsibility.

"Get and keep the best," he said as our conference ended.

Mr. Wilson had no sympathy with the fear of hurting some man's "feelings," which, he said, is the rock upon which efficient public service often goes to pieces. The big job called for the big man, and no personal consideration had any weight with him in getting the thing done, and done in the best way. "Get and keep the best," without regard to friendship, past performance, prestige, social or political pull, guided the President in his entire conduct of the war. It was that policy which enabled American power to be thrown into the scales so quickly and decisively.

It is gratifying to recall that under the rigid test of war, every responsible officer in the Navy Department measured up to his full duty. Not one failed to meet the requirements of his position. No change whatever was required. Franklin D. Roosevelt was Assistant Secretary of the Navy, Admiral William S. Benson was Chief of Naval Operations, Rear Admiral Charles J. Badger head of the General Board. The bureau chiefs were: Rear Admirals Robert S. Griffin, Engineering; David W. Taylor, Construction and Repair; Ralph Earle, Ordnance; Leigh C. Palmer, Navigation; Samuel McGowan, Supplies and Accounts; William C. Braisted, Medicine and Surgery; F. R. Harris, Yards and Docks. Captain W. C. Watts was Judge Advocate General, and Major General George Barnett,

Commandant of the Marine Corps. When Admiral Harris resigned in December, 1917, to become head of the U. S. Emergency Fleet Corporation, he was succeeded as Chief of the Bureau of Yards and Docks by Rear Admiral Charles W. Parks. Captain Watts, requesting sea duty in March, 1918, was succeeded by Rear Admiral George R. Clark as Judge Advocate General. Thus, practically all those who were in office when war began served to its end. And no men ever did better service. Able and energetic, they worked together with a harmony and efficiency never excelled.

U-boat warfare being aimed directly at shipping, our own as well as that of other nations, the protection of American merchantmen was of prime importance. As the President was announcing the severance of relations with Germany, February 3d, the steamer *Housatonic* was sunk in European waters, and on February 12th, the schooner *Lyman M. Law* was sent down by the Germans.

Though he considered that under the general powers of the Executive he had the authority to arm merchant vessels for protection, the President desired, before taking such an important step, which must almost inevitably result in gunfire engagements with U-boats, to ask the support of Congress. Before that time, at a cabinet meeting at which this matter was discussed, the President turned to me and asked:

"Daniels, has the Navy the guns and gunners for this job?"

"We can arm them as fast as the ships are ready," I replied.

On February 26th, in an address to the two houses, President Wilson requested that Congress authorize him to "supply our merchant ships with defensive arms, should that become necessary, and with the means of using them, and to employ any other instrumentalities or methods that may be necessary and adequate to protect our ships and our people in their legitimate and peaceful pursuits on the seas." A bill to this effect, introduced at once, promptly passed the House by a large majority, but failed in the Senate by reason of a filibuster conducted by a handful of Senators who by continual debate prevented the bill from coming to a vote before the end of that Congress on March 4th.

It was this filibuster that called forth the President's denun-

ciation of the "little group of willful men" who had, with reckless disregard of the country's needs, prevented important legislation, and his suggestion that the rules of the Senate be changed so as to make impossible any such occurrence in the future. Before adjournment a large majority of the senators signed a document stating that they favored the bill to arm American merchantmen, and would have voted for it, had they been given the opportunity.

Confident that he had the power under the Constitution, and a large majority of Congress having expressed its willingness to grant him specific authority, the President on March 12 directed me to furnish guns and naval gunners to American ships. Guns and men were ready, and the work of arming merchantmen began immediately. In two days guns were installed on the *Manchuria, St. Louis* and *Aztec,* and four days later the *New York* and *St. Paul* were equipped. The *Manchuria* sailed for England March 15, and thereafter a constant succession of merchant ships carrying armed guards left our ports for Europe.

The day after Bernstorff was dismissed the General Board had submitted the following specific steps to be taken in case of conflict with Germany:

G. B. No. 425. Confidential. Serial No. 666.

February 4, 1917.

From: Senior member present.
To: Secretary of the Navy.
Subject: Steps to be taken to meet a possible condition of war with the Central European Powers.

On account of existing conditions, the General Board recommends that the following steps be taken to meet a possible condition of war with the Central European Powers:

1. Complete complements and allowances of all kinds, first of the A and B fleet, then of the C fleet, and naval districts.
2. Mobilize the A fleet in the Lower Chesapeake, and increase it immediately to the B fleet. (See Black Plan.)
3. Dock and repair all ships in reserve and ordinary that will be used.
4. Arrange for the supply of fuel to the fleet and stock all fuel depots to capacity.
5. Establish additional recruiting stations and increase personnel of the Navy and Marine Corps to the total number required to supply

complements for all the ships built, building, and authorized, and to maintain shore establishments and naval defense districts, including aviation service, with 10 per cent additional for casualties as follows: Enlisted force—Navy, 150,000; Marines, 30,000; officers in the proportion prescribed by law.

6. Mobilize the naval districts, including the Coast Guard and Lighthouse services, and put patrol vessels, mine sweepers, etc., of the Atlantic coast districts, on their stations; no commercial vessels to be mobilized in the Pacific coast districts at present.

7. Prepare to the utmost detail for the employment of mines along our coast as may be necessary.

8. Prepare nets and other obstruction for submarines, ready for immediate use, at the Chesapeake Capes, Delaware Capes, entrance to New York Bay, eastern entrance to Long Island Sound, Narragansett Bay, Panama Canal, and Guantanamo. Other places as their need becomes apparent. The General Board considers it of the utmost importance that net protection shall be immediately provided for the fleet during its mobilization in Chesapeake Bay.

9. Establish immediately the guards at all navy yards, magazines, radio stations, powder factories, munition plants, bases, ship-building yards, and naval shore utilities in accordance with the mobilization plans.

10. Reduce the force of Marines in Haiti and Santo Domingo to the smallest number that can maintain order there, transferring these men to the United States to perform necessary guard duty at navy yards, magazines, radio stations, ship-building plants, and to form cadres for the organization of new regiments as recruits are obtained. Organize the advanced base force and complete its equipment.

11. Leave in the Caribbean a sufficient number of light cruisers to keep a lookout for submarines in those waters and for the protection of our interests there. Protect the Canal and Guantanamo as far as possible, by the use of mines and where possible by monitors, submarines and nets.

12. For the present use the greater part of the destroyer flotillas as patrol for submarines in the vicinity of the principal ports or entrances leading to them.

13. Base the submarines at Canal, Guantanamo, and points along the coast in accordance with the Black Plan.

14. Rush to completion all naval vessels building or authorized; also build up the Aviation Service as rapidly as possible.

15. Guard all bays and harbors on the coast of Maine to prevent their use as bases of supply. Patrol waters of Haiti, Santo Domingo, Porto Rico, and Danish West Indies, the Cuban Coast Guard Service to assist in patrolling all bays and gulfs of the coast of Cuba.

16. Prepare to close entrances to all ports at night and discontinue or change such aids to navigation as may be necessary.

17. Organize a comprehensive system of intelligence service covering the whole theater of war in accordance with the plans of the Office of Naval Intelligence.

18. Take possession of all interned vessels of war of Central Powers; also take control of all commercial vessels of Central Powers now in United States waters.

19. Place under surveillance all citizens of the Central Powers in the Navy or in Government employ in naval establishments, and remove them from positions in which they may do possible harm.

20. Arm our merchant ships for purposes of defense.

21. In accordance with Black Plan, carry out the following:

(a) Issue proclamation prescribing defensive sea areas and put rules in regard to them in force.

(b) Issue proclamation prescribing press regulations and establishing censorship of cable and radio, including naval control of all commercial and private radio stations.

(c) Issue President's order in regard to visit and search, capture, etc.

22. And as most important, arrange, as soon as possible, plans of cooperation with the naval forces of the Allies for the joint protection of trans-Atlantic commerce and for offensive naval operations against the common enemy.

CHAS. J. BADGER.

General war plans, as I have stated, had been developed years before under the direction of Admiral Dewey. Among these was the "Black Plan" designated for "war in the Atlantic," really for war with Germany. Revised from time to time as the progress of the European conflict suggested changes, this was constantly kept up to date, and covered thoroughly general policies and operations. The recommendations of February 4th and various others submitted later were for specific things to be done in consonance with the general scheme.

A week after the break with Germany, I sent the following to the General Board:

February 10, 1917.

To: The General Board.
Subject: Solution of Problem.

1. The Department desires the General Board to consider the following problem and submit its solution as soon as practicable:

PROBLEM

General situation—Conditions as at present except that war with Germany is declared.

Special situation—The Allies do not desire our battleship force at present.

Required—Naval estimate of the situation: first, as to the grand strategy demanded by the situation; second, as to the disposition of the battleship force; third, as to the method of assisting in maintaining communications with Europe, including scheme for coöperation with Allies; fourth, as to method of driving submarines from the sea.

Assume—Mobilization of all naval vessels and possibility of mobilizing merchant vessels as required.

JOSEPHUS DANIELS.

Anti-submarine warfare, coöperation with the Allies, was the keynote of all our plans, as of this "problem," the solution of which the General Board submitted on February 17. We were then, as always, planning "for the joint protection of trans-Atlantic commerce," as the Board expressed it, "and for offensive naval operations against the common enemy."

CHAPTER IV

THE DAY OF DECISION

MOST IMPORTANT CABINET MEETING OF WILSON ADMINISTRATION HELD MARCH 20, 1917, WHEN IT WAS DECIDED TO CALL CONGRESS IN SPECIAL SESSION TO DECLARE WAR—"I WANT TO DO RIGHT, WHETHER IT IS POPULAR OR NOT," SAID THE PRESIDENT—FLEET ORDERED NORTH—NAVY AND MARINE CORPS INCREASED TO EMERGENCY STRENGTH.

TUESDAY, March 20, 1917, is not fixed in the war chronologies, so far as I can find. But it should be, for that was the Day of Decision. That was the occasion of the most important Cabinet meeting of the Wilson administration, in fact without doubt the most important of our generation.

Eleven days earlier the President had called Congress to meet in special session April 16th, "to receive such communication as may be made by the Executive." But events were moving rapidly. Four American vessels had been sunk without warning—the *Algonquin, City of Memphis, Illinois,* and *Vigilancia*—with the loss of American lives. German U-boats were destroying shipping by the hundred thousand tons. We had been arming merchant vessels, but it was evident that this "armed neutrality" in itself was insufficient, valuable as it was.

The "overt act" had occurred. The Germans were sinking our ships, killing our citizens on the high seas. There were matters of vital importance to be discussed when the Cabinet met. Congress had already been summoned to meet within a month. But every day counted.

Should the special session be called at an earlier date? What message should be sent to Congress in view of the situation? These were the questions propounded by the President, who was grave, feeling the deep sense of responsibility. He wished

every member of the Cabinet to state his conviction of the national duty, he told us, and each spoke from his standpoint.

I have often wished that it might have been possible to preserve a record of Cabinet meetings, particularly in the months preceding and during the war. If the American people could have seen the President and heard him as he spoke to us on March 20th, they would have felt a confidence and admiration which nothing else could have imparted. I do not feel at liberty to give from memory what he said, or the statements of the ten members of the Cabinet. His severest critics have praised President Wilson's power to express national sentiment and set forth problems and solutions in living sentences in his public addresses. That power was even more markedly displayed in the bosom of his official family.

That day he began by sketching the steps this country had taken to protect American lives. He was disinclined to the final break. As he so often did in laying weighty matters before the cabinet, Mr. Wilson clearly stated the events culminating in repeated sinking of American ships by German submarines, and then, with a sort of seeming detachment, invited the views of the Cabinet.

It was a supreme moment. Some of us, fully in harmony with the President's patient and long successful efforts to protect American rights by peaceful means, had at last, like himself, lost hope of world and national safety without resort to war. Others, approving of steps taken, had earlier wished entrance into the struggle. It is interesting, even when the matter is not one greater than life and death, as was this determination, to observe how ten men with the same objective will differ in the presentation of their views or the reasons which prompt their conclusions. No two of the Cabinet on that day gave expression to precisely the same reasons, or rather, I should say, aside from the impelling reason, each had been influenced by some incident or argument he presented. But all were convinced that the character of the warfare being waged by the Central Powers could no longer be tolerated and that no course was open but for America to throw the weight of its great power into the scales against Germany.

After all had advised that Congress be called in session as

early as practicable, one member read a number of telegrams conveying the impression that popular opinion was strongly in favor of our early entrance into the war.

"We are not governed by public opinion in our conclusion," said the President. "I want to do right whether it is popular or not."

The next morning the proclamation was issued summoning Congress to meet April 2, "to receive a communication by the Executive on grave questions of national policy which should be taken under consideration."

War was only a matter of days. Under the conditions, the place for the fleet was in home waters. When I returned to the Department after the Cabinet meeting, orders were sent to Admiral Mayo to bring the fleet north at once. Some smaller vessels were left in the Caribbean to protect tankers coming from Mexico and Texas. Though the day previous I had asked the General Board to consider carefully whether everything possible was being done for the protection of our ships entering the proscribed area, that afternoon, accompanied by Admiral Benson, I attended a meeting of the Board, informing its members that the President wished them to outline every measure that the Navy could employ for protection of American shipping entering European ports, beyond the provision of armed guards which we had already undertaken. I told the Board that we desired the fullest and most ample protection, regardless of effort or expense.

Replying immediately, the Board recommended:

Escort vessels to deep water from our ports, and similarly from deep water to our ports.

Arrange with British and French Governments for the convoy of our ships through the barred zones.

Merchant ships to proceed on high seas from points of leaving and receiving escorts, depending upon their guns for protection and upon changes of course to follow alternate routes.

Arrange with British and French Governments a code of signals to be used in directing merchant ships as to routes to be followed and points of meeting escorts.

Establish a patrol of the Atlantic coast.

Recruit up to the limit allowed by law for emergencies in order to provide crews for patrols and auxiliaries, and fill battleship complements which have been depleted to supply gun crews to merchant ships.

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PRESIDENT WILSON AND THE WAR CABINET

Around the table, from left to right: the President, Secretary of the Treasury McAdoo, Attorney General Gregory, Secretary of the Navy Daniels. Secretary of Agriculture Houston, Secretary of Labor Wilson, Secretary of Commerce Redfield, Secretary of the Interior Lane, Postmaster General Burleson, Secretary of War Baker, Secretary of State Lansing (in light suit).

AMERICAN DREADNOUGHTS, THE EMBODIMENT OF SEA POWER

At the next meeting of the Cabinet, on Friday, I presented the authority granted by Congress to increase the enlisted strength of the Navy to 87,000, and the President directed me to fill up the Navy and Marine Corps to the full number authorized in case of national emergency.

On Saturday afternoon the President called at the Navy Department. Mrs. Wilson came with him. The rapid approach of war weighed upon him, and he wished to keep in close touch with all military preparations. It was then that I brought up the matter of sending to London a naval officer of high rank, which resulted, a few days later, in the sending of Admiral Sims.

I also informed him of the result of the important conference we had held that morning with shipbuilders to secure rapid construction of additional destroyers. Before that time we had always insisted upon and been able to secure "fixed price" contracts, under which it could be known precisely what a vessel would cost, the builders being under bond to deliver it to us at the price agreed upon. But this was no longer possible. With the rising cost of labor and materials, the builders were unwilling to name specific figures. Reluctantly, I agreed to a contract based on actual cost of construction with ten per cent profit. Destroyers were sorely needed, we wanted all the shipyards could build, and expedition was worth all it might cost. As a matter of fact, no other construction during the war was accomplished with so little increased cost.

That night the President signed the order directing that the authorized enlisted strength of the Navy be increased to 87,000 men, and the next day I sent a telegram to the newspapers of the country, more than a thousand of them, asking them to print the order on the first page and also make an editorial appeal for recruits, saying:

> New ships and ships in reserve are being fully commissioned as rapidly as possible, and the need is imperative for a larger enlistment to man them. There has been a net increase of over 6,500 in enlistment since Congress recently authorized an increase, but many more are needed and needed now.

This appeared in nearly every paper in the United States, and most of them accompanied it with an editorial. It was an

example of the fine spirit of coöperation and patriotism shown by the American press during the entire war. Every recruiting station was telegraphed to increase the force and to engage doctors to examine applicants, so there would be no delay. Within a few hours after the President signed the order to increase the Navy, the recruiting campaign was under way in every part of the Union.

Thursday afternoon at 4:30 o'clock, as I was holding the daily interview with the press, President Wilson, unannounced, came into the Navy Department. It was several minutes before I knew he was there. There had been a rapid fire of interrogations and answers between the Secretary and the correspondents when an officer came to my desk and said, "The President is here." He was sitting quietly at the other end of the big room, listening to the cross-examination which a cabinet officer undergoes at the hands of press representatives twice every day. And they always ask "searching questions." As soon as the newspaper men knew the President was in the room, they lost all interest in me and I asked to be excused from further questioning.

"Do you have to undergo that ordeal every day?" Mr. Wilson asked.

"Yes, twice every day," was my reply; "but it is not usually an ordeal. Being a newspaper man myself, I recall that most of my life has been spent in doing to other public officers what those reporters are doing to me—and, besides, I rather like it."

What to do with the interned German ships was still a puzzling and undecided question, and that was one of the matters that Mr. Wilson had come to discuss.

"We must keep in close touch," he said, as he opened the conversation. He spoke of the submarine situation and the interned ships, and then showed me a letter from a man of importance to the effect that an Austrian had arrived in the United States on a submarine, had called upon the Austrian Consul at New York, and given him important papers which had been brought from Europe in the undersea boat. He understood that two submarines had come over from Germany, the writer said.

While this seemed improbable, a telegram was sent in code

to all naval commanders and stations to be on the lookout. That night a message was received from the Commandant of the New York district that two submarines had been sighted off Montauk Point. Destroyers and motor boats were sent there to search the vicinity.

This proved to be a "false alarm," as did so many reports which were sent forth with every particularity in that early period. But we had to investigate all that seemed possible, for we could not afford to take any chances of surprise attacks.

CHAPTER V

SENDING SIMS TO EUROPE

COOPERATION WITH ALLIES THE KEYNOTE OF OUR POLICY—ADMIRAL WILSON FIRST CHOSEN—SIMS' MISSION AND INSTRUCTIONS—SAILED AS "S. W. DAVIDSON," PRIVATE CITIZEN—BRITISH HAD NO PLANS THAT PROMISED SUCCESS, LORD JELLICOE TOLD HIM—CARSON PRAISED AMERICA'S "SPEEDY ACTION."

THE most important thing, perhaps, that I discussed with the President when he visited the Navy Department March 24th was sending to London an officer of high rank who would put us in more intimate touch with the British Admiralty.

The text of that discussion was the following cablegram just received from the American Ambassador:

London, March 23, 1917, 7 p. m.

Secretary of State,
Washington.

Mr. Balfour has shown me the informal suggestion conveyed by the Navy Department through Gaunt [British naval attaché on duty in Washington] regarding closer relations and his reply. The British Government will heartily fall in with any plan we propose as soon as coöperation can be formally established. It was intimated to me that a submarine base on the coast of Ireland would then be assented to.

The whole subject of active coöperation and the best methods to bring it about have been informally discussed by me with Mr. Balfour, Mr. Bonar Law, the Prime Minister, Admiral Jellicoe, and others at their invitation, and they will most gladly assent to any proposals that we are likely to make. They withhold proposals of their own until the way has formally been opened by us lest they should seem to push themselves upon us, which they, of course, do not wish to do.

I know personally and informally that they hope for the establishment of full and frank naval interchange of information and coöperation. Knowing their spirit and their methods, I can not too strongly recommend that our government send here immediately an admiral of our own navy who will bring our navy's plans and inquiries. The coming of such an officer of high rank would be regarded as a com-

pliment and he would have all doors opened to him and a sort of special staff appointed to give him the results and methods of the whole British naval work since the war began. Every important ally has an officer of such high rank here. In a private conversation with me today at luncheon Mr. Balfour expressed his enthusiastic hope that such a plan would be immediately carried out. Many things of the greatest value would be verbally made known to such an officer which would never be given in a routine way nor reduced to writing.

Admiral Jellicoe has privately expressed the hope to me that our navy may see its way to patrol our coast and possibly relieve the British cruisers now on our side of the Atlantic. He hopes too that in case more German raiders go out we may help capture them in waters where they prey on shipping from Mexico or South America.

If our Navy Department will send an admiral it would be advantageous for me to be informed as soon as possible. The confidential information that he will come by would be of immediate help. Such an officer could further definite plans for full coöperation.

PAGE.

We had presented the proposition informally through the British naval attaché, as the Ambassador pointed out. Captain McDougall, our naval attaché in London, was given access to all records which were not confidential, and his intimate association with the officers of the Admiralty enabled him to keep the Navy Department in constant touch with the situation and to give us data bearing on many phases of naval effort. But there were, of course, many things kept secret, unrevealed to any neutral. Our break with Germany brought about new conditions, and made possible a more intimate exchange of views between the American and British navies. Ruthless U-boat warfare begun only a few weeks before, the Germans sinking shipping by the million tons, and the British naturally concealing their losses and their plans, made it important for us to secure the fullest information as to the exact situation, and what steps were being taken to meet it. And in case war was declared, to have in London an admiral to aid the Department in putting into immediate effect the coöperation with the Allies which we were planning.

That Saturday afternoon I discussed Ambassador Page's cablegram and the whole matter with the President, and he approved the plan. Then the question arose as to what officer should be selected for this important mission. The choice was

Admiral Henry B. Wilson, later commander-in-chief of the Atlantic Fleet, then commanding the battleship *Pennsylvania*. But we were creating a strong patrol force and Admiral Wilson was regarded as the best man to organize and command it.

Admiral Jellicoe was, as Ambassador Page said, particularly anxious that our Navy might "see its way to patrol our coast and possibly relieve the British cruisers now on our side of the Atlantic," and also, in case more German raiders got out, as was feared, to "help capture them in waters where they prey on shipping from Mexico or South America." This was in line with the policy we had already adopted. Formally organized on March 28, Admiral Wilson was put in command of this force, which accomplished just what Admiral Jellicoe then suggested, and what was one of the first requests made, after war was declared, by Admirals Browning and Grasset.

The Germans, naval officers pointed out, might well conclude as soon as we declared war to send submarines across the Atlantic to attack shipping and cut down the flow of munitions and supplies to Europe. One or two operating in the Gulf might interrupt the shipment of oil from Mexican fields, the largest source of supply for the British Fleet. A strong patrol force would not only protect all shipping on this side of the ocean, but, well organized and equipped, would be ready when called upon, to operate in European waters, as it did later on. So, it was determined to assign Wilson to that duty and Admiral William S. Sims was then chosen for the London mission.

On Monday, March 26, I telegraphed him to come to Washington. He arrived on the 28th and came to the Navy Department in the afternoon. Referring to Mr. Page's telegram, I told him the President had decided to send an admiral to England, and he had been selected. Informing him, in confidence, of our belief that the time was near at hand when the United States would enter the war, I told him that, in that event, we must prepare for the fullest coöperation with the British Navy. But his immediate duty, I pointed out, was to secure all possible information as to what the British were doing, and what plans they had for more effective warfare against the submarines.

In the course of the conversation, I said: "You have been

selected for this mission not because of your Guildhall speech, but in spite of it." In that speech Sims had said, "If the time ever comes when the British Empire is seriously menaced by an external enemy, it is my opinion that you may count upon every man, every dollar, every drop of blood of your kindred across the sea." Impressing upon him the fact that the United States was still neutral, and that until Congress should declare war his mission must be a secret and confidential one, I informed him that it had been decided not to issue written orders detaching him from his duties at Newport, but for him to go quietly as a civilian passenger, and report to Ambassador Page personally before any public announcement was made.

Among the matters discussed was the extent of the sinkings by submarines. Ambassador Page had written me confidentially that the situation was more serious than the British admitted. I told Admiral Sims that the President believed the British had not taken the necessary vigorous offensive to prevent destruction of shipping by the U-boats and that he strongly believed two things ought to be done:

First, that every effort should be made to prevent the submarines getting into the Atlantic—that they ought to be shut up in their own coasts, or some method should be found to prevent their ingress and egress.

Second, that all ships ought to be convoyed. The President had been of this opinion for a long time, and had insisted that it was essential to give protection to shipping. The General Board had strongly recommended convoy, and I favored it. But, as I told Admiral Sims, I had taken this matter up with naval officers in the Department, and there was division of opinion, most of them seeming to agree with the British Admiralty, which apparently opposed the convoy system. It had not been adopted abroad.

Admiral Sims seemed pleased with his mission and instructions. And the only official instructions he received were those I gave him. But, someone may ask about the sensational statement in his letter that he was given the explicit admonition, "Don't let the British pull the wool over your eyes. It is none of our business pulling their chestnuts out of the fire. We would as soon fight the British as the Germans."

I never heard of that until I read it in Sims' letter of January 7, 1920. Later, testifying before the Senate investigating Committee he stated that the remark was made by Benson, who afterwards in Paris made a similar statement. "I will admit that I had completely forgotten the incident," said Sims in regard to the latter. "It was recalled to me by a member of my staff who was present, and who heard it. I think that the reason I did not remember that distinctly was because I regarded it as a personal idiosyncrasy of the Admiral. I had known the general opinion that he was intensely anti-British, but it did not affect me particularly."

"I have always had the best possible personal relations with Admiral Benson," he continued. "I regard him as an upstanding and honest man who has exceedingly strong convictions and who is very firm in adherence to those convictions. I believe everything he has done during the war has been done conscientiously, and to get along with the war."

Benson said he could not recall just what was said; that he strongly approved Sims' selection, but probably used "very forcible language" in impressing upon him the seriousness of the situation and the importance of being very careful that "his feelings toward the British did not lead him into any indiscretion." He denied strongly that his words could be interpreted to mean anything else.

In view of these statements and the known fact that Admiral Benson and everybody else in our navy earnestly coöperated with the British, and that Benson had a large part in arranging this coöperation before Sims reached London, I think there is no occasion for any further allusion to the remark.

On the last day of March, a week before war was declared, Admiral Sims and his aide, Commander J. V. Babcock, boarded the steamship *New York,* entered upon the passenger list as "S. W. Davidson" and "V. J. Richardson." Their fellow voyagers had no idea that "Mr. Davidson" was an admiral of the United States Navy going abroad on an important mission, and "Mr. Richardson" was his aide.

Reaching Liverpool April 9th, after an uneventful voyage, the *New York,* as it approached the outer harbor, struck a mine. Though the ship was not damaged beyond repair, it was crip-

pled, and the passengers were transferred to another vessel and taken ashore. At the dock the American officers were welcomed by Rear Admiral Hope, and they found that a special train, provided by the Admiralty, was waiting to take them to London. Admiral Sims on arrival there at once conferred with Ambassador Page and the British naval authorities, and was admitted to the confidence of the Admiralty.

Since his departure from America, there had been a radical change in the situation. The United States had declared war against Germany, and we were free to deal with the Allies as associates in the great conflict. While Sims was having his first interview with the authorities in London, we were in conference at Washington with the ranking British and French admirals in the Western Atlantic. In fact a working agreement was perfected, and orders had been issued to send destroyers to Europe before we received Sims' first dispatch. Thus Sims in London and our authorities in Washington carried out with the utmost cordiality that splendid coöperation between the British and American navies which continued throughout the war and which has hardly a parallel in naval history.

In his first cablegram from London, April 14, 1917, Sims reported:

> The submarine issue is very much more serious than the people realize in America. The recent success of operations and the rapidity of construction constitute the real crisis of the war. The morale of the enemy submarines is not broken, only about fifty-four are known to have been captured or sunk and no voluntary surrenders have been recorded. * * *
>
> Supplies and communications of forces on all fronts, including the Russians, are threatened and control of the sea actually imperilled.
>
> German submarines are constantly extending their operations into the Atlantic, increasing areas and the difficulty of patrolling. Russian situation critical. Baltic fleet mutiny, eighty-five admirals, captains, and commanders murdered, and in some armies there is insubordination.
>
> The amount of British, neutral and Allied shipping lost in February was 536,000 tons, in March 571,000 tons, and in the first ten days of April 205,000 tons. With short nights and better weather these losses are increasing.

The Germans, he said, had seventy mine-laying submarines, and were building new ones at a rate approaching three a week.

What were the British doing to meet this perilous situation? What plans did they have to defeat the U-boats? That was what we particularly wanted to know, and were surprised when it was not stated in that dispatch.

Describing his first interview with Lord Jellicoe, Admiral Sims says, in his book, published three years later:

"It looks as though the Germans were winning the war," I remarked.

"They will win, unless we can stop these losses—and stop them soon," the Admiral replied.

"Is there no solution for the problem?" I asked.

"Absolutely none that we can see now," Jellicoe announced.

What the British were doing in regard to protecting ships was set forth clearly in Sims' letter of April 19, in which he said:

After trying various methods of controlling shipping, the Admiralty now believes the best policy to be one of dispersion. They use about six relatively large avenues or arcs of approach to the United Kingdom and Channels, changing their limits or area periodically if necessity demands.

There was considerable criticism of the Admiralty, he said, "for not taking more effective steps," and one of the principal demands was for "convoys of merchant shipping, and more definite and real protection within the war zone." But not only officers but ship owners and captains opposed convoy, favoring the arming of merchant vessels and independent sailings, he informed us, saying:

The Admiralty has had frequent conferences with merchant masters and sought their advice. Their most unanimous demand is: "Give us a gun and let us look out for ourselves." They are also insistent that it is impracticable for merchant vessels to proceed in formation, at least in any considerable numbers, due principally to difficulty in controlling their speed and to the inexperience of their subordinate officers. With this view I do not personally agree but believe that with a little experience merchant vessels could safely and sufficiently well steam in open formations.

In this Sims was right, as was shown when, later, convoy was adopted. The system President Wilson had long advo-

cated, which shipping interests and many naval officers had opposed, proved not only practicable, but a very effective measure.

Urging that the maximum number of destroyers and anti-submarine craft be sent to Europe, Sims in his first cablegram informed us:

> It is very likely the enemy will make submarine mine-laying raids on our coasts or in the Caribbean to divert attention and to keep our forces from the critical areas in the Eastern Atlantic through effect upon public opinion.

We had to expect this and to provide against it; and at the same time extend all possible aid to our Allies in Europe. Destroyers had already been ordered abroad, the first arriving May 4, and others were sent over in rapid succession.

Was this quick response? The English so considered it. Sir Edward Carson, First Civil Lord of the Admiralty, called it "speedy action" when he said in his address to the British Navy League on May 17:

> "The toast that I have to propose is that of the American Navy. I give it to you from the bottom of my heart. The date of this particular function is very opportune. It almost coincides with the arrival in our seas of the first installment of the assistance which the American Navy is going to give us in the terrible task that is before us. It enables us who are members of our Navy League, and it enables me as for the moment presiding over the great service of the Admiralty in this country, to express and demonstrate our appreciation of the speedy action of the American Navy and to offer a hearty welcome to the officers and men who have reached our shores. * * *
>
> "I don't underestimate the submarine menace. It is a great, a novel, and a terrible menace. It is a menace that has been unsolved by any navy—our own navy, the German navy, the Austrian navy, the Italian navy, or the American navy. But don't imagine you will solve it by abuse or funk. No, the way to look upon it is that it is a real danger, and it is the work of men to face and solve real dangers."

The problem being still unsolved, it was up to our Navy to devise some plan that might solve it. And we did propose, nine days after this country entered the war, the biggest project that was put into effect—mine barrages to shut in the U-boats, preventing their egress into the Atlantic. On April 15 our Bureau

of Ordnance presented plans for mine barriers across the North Sea and the English Channel. On April 17, I cabled Sims to report on the practicability of blocking the German coast, to prevent submarines from getting out from their bases. He replied that this had been tried and found "unfeasible," and said:

> To the best of my knowledge and experience we should adopt present British methods and base further developments only upon actual experience in coöperation with them.

That the barrage was unfeasible was the opinion of the Admiralty officers, but it was not the view of the Prime Minister, Lloyd George, who like President Wilson and our own ordnance officers, did not regard it as impossible, for Sims in his mail report to us April 19th said:

> The Prime Minister only two days ago expressed to me the opinion that it ought to be possible to find physical means of absolutely sealing up all escape for submarines from their own ports. The fact that all such methods (nets, mines, obstructions, etc.) inherently involve the added necessity of continuous protection and maintenance by our naval forces is seldom understood and appreciated. I finally convinced the Prime Minister of the fallacy of such propositions by describing the situations into which we would be led: namely, that in order to maintain our obstructions we would have to match the forces the enemy brought against them until finally the majority if not all of our own forces would be forced into dangerous areas where they would be subject to continual torpedo and other attack, in fact in a position most favorable to the enemy.

But the naval administration at Washington had faith in that idea, and urged it again and again, until it was adopted, and the vast barrage was laid across the North Sea.

CHAPTER VI

NAVAL ALLIES IN HISTORIC CONFERENCE

FOUR DAYS AFTER WAR WAS DECLARED, BRITISH, FRENCH AND AMERICAN ADMIRALS MET AT FORTRESS MONROE TO MAP OUT PLANS FOR IMMEDIATE COOPERATION—CONFERENCE AT WASHINGTON, APRIL 11TH, FIXED THE POLICY OF UNITED NAVAL EFFORT—FREQUENT AND FULL INTERCHANGE OF OPINION WITH ALLIES.

FOUR days after war was declared, admirals of the United States, Great Britain and France were in conference at Fortress Monroe. Immediately upon the action of Congress, without awaiting the arrival of Admiral Sims, then on the ocean bound for London, arrangements were made to confer with the commanders-in-chief of the British and French forces on this side of the Atlantic, who were familiar with conditions overseas as well as on this coast. When they arrived, Admiral Benson asked: "Where can our Navy render the best immediate service?"

Then these sea fighters sat down to an all-day session to find the best answer to Benson's question. The Allied admirals, who had been in the war from the beginning, told what had been attempted, what achieved, and the ways wherein they hoped America could come to the rescue.

Hampton Roads was the site of a historic conference, between Abraham Lincoln and Alexander H. Stephens and others in 1865, when there was hope that the War between the States might be brought to an end. That conference failed, but this of April 10, 1917, was a pronounced success; for it was followed the next day by the conference at the Navy Department in Washington, which laid the foundations for the perfect coöperation in the war with Allied governments, the first agreement the United States Navy ever made with foreign naval officials to wage war together. At the time even the fact that it was held was secret, and its conclusions were sent abroad only in code.

For secrecy was necessary in regard to this as well as other plans and operations.

Since 1914 both the British and French navies had maintained their ships in the Western Atlantic from Halifax to Southern waters. Vice Admiral Browning and Rear Admiral Grasset, in command of the British and French forces, respectively, were at Bermuda when war was declared and came at once to Hampton Roads. Admiral Benson, Chief of Naval Operations, accompanied by Admiral Mayo, Commander-in-Chief of the fleet, went from Washington on the President's yacht, the *Sylph,* and were joined by Admiral Wilson, in command of the United States Patrol Force. In sight of the spot where the *Monitor* and the *Merrimac* met in their epoch-making fight over half a century before, these admirals exchanged views regarding the naval conduct of the war. Admiral Browning had been in command of a squadron in the North Sea, and acquainted the American officers with conditions abroad, and they in turn advised the visiting admirals of conditions here.

At the conclusion of this meeting, all these admirals came to Washington for a conference with the Secretary of the Navy. They sailed on the *Sylph,* and the unprecedented spectacle was witnessed of that little ship flying the flags of staff officers of three nations. It was symbolic of the unity which marked their joint operations during the war.

Upon their arrival, in addition to the admirals who had met them in Hampton Roads, I invited to confer with them the Assistant Secretary of the Navy, and the members of the General Board. "This conference," I stated when we had assembled in the rooms of the General Board, "has been called to consider and carry out without delay the best plans for the fullest co-operation of the navy of the United States with the allied navies, and to place every ounce of our naval strength into the struggle in the ways where it will do most to win victory."

Turning to the British and French representatives, I said that as their nations had been long in the war we desired to learn by their successes and be warned by their failures, if they had made any. The conference was a protracted one and discussed every phase of the naval situation. The British and French admirals told of their long and satisfactory talks with

Benson, Mayo and Wilson, and stated that they were practically agreed as to the plans which they thought would best aid in the object all had in view. They made certain suggestions and the following arrangements were made by which, it was agreed, the United States could best throw its weight into the struggle:—

1. The United States Navy to take over the patrol of the Atlantic coast from Canada to South American waters. They explained the importance of that patrol and why they had felt it essential to preserve it since 1914. They gave three reasons for its continued maintenance: (a) protection of shipping for the Allied armies, including food for their civilian populations, and oil from Mexico for their fleets and armies; (b) protection against the coming of U-boats, which was deemed not only possible but probable; and (c) readiness to destroy German raiders. They told us that if we could take over this patrol it would serve the double purpose of protecting shipping on this coast and releasing their ships, which were needed at home.

At that time both here and abroad there was a general belief that German strategy would dictate the sending of U-boats to our coast. There was a fear too (and there were many reports), of possible submarine bases at out-of-the-way places on the Atlantic and Gulf. Indeed, from the beginning of the war in 1914 the Navy had been vigilant in sending craft into all places on our coast, from Canada to the Panama Canal, which might possibly enable U-boats to subsist in our waters. That conference agreed that this vigilance should be continued and made more effective, because it was thought the incentive to submarine activity on this side of the Atlantic would be stimulated by the desire to sink transports carrying American troops.

2. The United States to have in readiness squadrons to operate against any raider in either the North or South Atlantic. That was regarded as of great importance by the French and British conferees, and it was one of the chief duties of our Patrol Squadron. Speaking later of that, Admiral Badger, head of the General Board, said: "While a discussion of the general subject was had, the British and French admirals were particularly concerned as to the patrol of the east coast of North and South America, for which their forces were considered inadequate." The Chief of Naval Operations was directed, at this

meeting, to strengthen the patrol force and to send it wherever it would render the quickest and best service against the enemy. It was later sent to Gibraltar, to protect the vast volume of shipping plying between the Mediterranean and Northern Europe. The Pacific fleet, under Admiral William B. Caperton, was later on duty on the coast of Brazil and other South American countries for the protection of Allied shipping in the South Atlantic.

3. Recognizing the accepted naval doctrine of all countries that destroyers should be provided for operation with every dreadnaught, the British and French admirals said they hesitated to request the detachment of any destroyer from the fleet. "Of course your fleet naturally would not be willing to part with or weaken the screen of destroyers," said Admiral Browning, but he expressed the hope that we might send at once one or two destroyers to Europe for the moral effect this would inspire, as well as their aid in combatting submarines. Though the commander-in-chief felt it would be taking desirable protection from his fleet, it was agreed immediately to send six. "We will send a division at once," I informed the British and French admirals, "and all other aid in our power." Admirals Benson and Mayo were then directed to issue the necessary orders for the destroyers to make ready for distant service. Later the number was increased, and by the end of May twenty-eight were at or on their way to Queenstown. In pursuance of the policy of the United States adopted at this conference, the American Navy continued to send destroyers, submarine chasers, yachts and other craft overseas until the number in Europe reached 373.

4. Our Navy agreed to look after the west coast of North America from Canadian to Colombian boundaries.

5. It was promised that United States armed government vessels would maintain continuous service to Chile, from which country America and the Allies obtained nitrates indispensable for the manufacture of munitions. All during the war there was fear that the steady flow of nitrates might be interrupted, and every effort was made to transport large quantities as rapidly as possible. It was gratifying when Admiral Browning reported that the British relations with Chile were "excellent." While our relations with that country were also cordial, scarcity of ships and hazards of transportation were such that the United

States spent many millions to establish nitrate plants within its own borders.

6. It was agreed that our Asiatic fleet should be maintained. It operated in close coöperation with Allied fleets all during the war and they acted together when conditions in Russia became acute.

7. Our Navy undertook to supervise the Gulf of Mexico and Central American waters as far south as the Colombian boundary and as far east as Jamaica and the Virgin Islands. It was through this area that Allied navies transported their oil, chiefly from Tampico. The protection of tankers was always of prime importance and the patrol of those waters, begun before we entered the war, was carried on until its close, first under Admiral Wilson and afterwards by Admiral Anderson. The vigilance of this patrol was never relaxed.

8. Our Navy assumed the duty of sending submarines to Canadian waters, "if and when enemy submarines appeared off that coast."

9. The French Admiralty was assured that, as soon as possible, we would send patrol vessels to the French coast. This was done, our armed yachts sailing early in June for Brest.

10. We also undertook to send armed naval transports for carrying needed railway material to France, one immediately, and others as soon as possible.

After the conference adjourned, I suggested that the Chief of Operations and the French and British admirals perfect the details of coöperation agreed upon. They did so, and a cablegram was sent by these admirals to their governments setting forth the foregoing definite steps agreed upon for active participation by the United States with the naval forces of the Allies.

Many other conferences followed, some of them notable, with Allied officers and government officials who came to Washington for consultation. All the Allied nations sent naval officers to Washington, many of whom remained during the entire war for the specific duty of expediting coöperation with our Navy. Some of them had authority virtually to conclude arrangements. There was always frequent, frank exchange of views, and the same spirit of oneness existed on this as on the other side of the Atlantic.

The French mission, which came in April, 1917, headed by Marshal Joffre and Viviani, was a distinguished body, embracing soldiers and sailors who had seen hard service. Joffre, the beloved "hero of the Marne," was the commanding military figure, and Washington, accustomed as it was to celebrities, gave him a reception never excelled in its wild enthusiasm. Everybody fell in love with him. Unaffected, simple, charming, he was the embodiment of French courage and comradeship. Other representatives of foreign governments had pressed the need of money and ships; but Joffre said, "Send fresh soldiers. We can arm them, and they can be trained in France as well as here."

Marshal Joffre expressed more than once his admiration of the appearance of the ships and crews on the American warships which he visited. "It is evident from their appearance, they are ready, enthusiastically ready, and their spic and span appearance is in marked contrast to the grimness of the French naval vessels," he said upon the occasion of his visit to Mt. Vernon, where in his tribute to Washington he said the early coming of American troops to France "will tighten the links of affection and esteem which have ever united France and the United States."

With Joffre came Admiral Chocheprat of the French Navy. He was met at Hampton Roads by Assistant Secretary Franklin D. Roosevelt, and came to Washington for conference with naval officials, who obtained from him valuable information from the seat of war. This enabled our Navy to render better assistance in French waters and led to the opening of more French ports for the landing of American troops and the quicker turnaround of transports.

The British mission, which was headed by the distinguished Mr. Balfour, arrived on April 21st. Its members brought the inside story of conditions, particularly in the desperate fight against the submarine. They had been met at Halifax and welcomed on behalf of the Navy by Admiral Frank F. Fletcher, who accompanied them to Washington. Mr. Balfour had, until a short time before, been First Civil Lord of the Admiralty. With him as naval representative was Admiral Dudley S. de Chair. They emphasized the seriousness of the submarine sinkings,

holding back nothing. American officials discussed the necessity of new naval offenses; attacking the German bases or constructing mine barrages to prevent egress and ingress of submarines and other plans to end the U-boat menace. As representative of the foremost sea power, the interchange of views between Admiral de Chair and our naval experts was most helpful. The Admiral was well pleased with the arrangements completed earlier in the month with Admiral Browning and with our broad plans and construction program.

Naval Allied coöperation was strengthened by conferences with the Prince of Udine, and the Italian mission; the Belgian mission headed by Baron Ludovic Moncheur; the Russian mission, whose naval representative was the ill-fated Admiral Kolchak; the Japanese mission, which included the able Vice Admiral Takeshita—all these and other special representatives who came from time to time or remained attached to their embassies in Washington. Later the British Admiralty sent as its representative Admiral Lowther Grant, who was in almost daily touch with officers of the Navy Department until the close of the war and won the regard of all.

Through the United States Naval Representative in London, American admirals on duty at Brest and Gibraltar and naval attachés abroad, the representatives of the Allied navies in Washington, who were kept fully informed by their governments, and the diplomatic and naval missions, the Navy Department was enabled to reach its decisions with all the possible lights before it. It never had to depend upon any single source of information.

These conferences at Washington were of the utmost importance because all large policies had to be settled by the Navy Department. Officers abroad were in command of ships assigned to them, and in emergencies upon their own initiative employed their forces to the best advantage. The ships overseas never were under independent command, but, as distinctly stated in orders, constituted a "task force of the Atlantic Fleet." Their orders stated: "The individuality of the United States forces should be such that they may be continuously ready to change their areas of operations as may be made necessary or by orders of the Navy Department."

In the World War it was necessary for the Navy to maintain close relationship with the President, the Council of National Defense, the State and War Departments, the War Industries Board, the War Trade Board, the Shipping Board and other war agencies, and the supply system for Army as well as Navy. It was essential to be in constant touch with the plans for the sending of troops and to have daily interchange of views with representatives of Allied navies. Intimate contact made for prompt action. The efficiency secured and maintained would have been impossible if the naval control had ever passed from Washington.

The decisions to establish bases at Brest, at Gibraltar and in the Azores were made by the Navy Department in Washington after conference with Allied powers. The result of their establishment justified the action taken. Routing of ships called for joint action between Allied and American naval agencies working together on both sides of the Atlantic. The movement of vessels carrying troops and supplies was necessarily dependent upon daily conference with War Department officials in Washington. Admiral William V. Pratt, who was Assistant Chief of Operations during the war, thus stated the main naval duty: "Our total naval effort in this war consisted less in the operation of forces at the front than in a logistic effort in the rear, in which the greatest problems we had to contend with originated and had to be solved, here at home. It must be noted that in this war the main united naval effort was one of logistics."

Building ships by the hundred; training men by the hundred thousand to operate them; producing munitions, materials and supplies by millions of tons; providing vessels to carry troops and men-of-war to protect them—all these problems of production and transportation were necessarily settled in Washington. It was this vast effort in America, directed from the Navy Department, which made possible all our activities in Europe, all the assistance we were able to render to the Allies and the general cause.

AMERICAN DESTROYERS IN QUEENSTOWN HARBOR
The depth charges are conspicuous on each stern.

From the painting by Bernard F. Gribble

THE RETURN OF THE MAYFLOWER

First American destroyers arriving in Queenstown harbor, May 4, 1917.

CHAPTER VII

"WE ARE READY NOW, SIR"

DESTROYERS, AFTER 3,000-MILE VOYAGE, PREPARED FOR IMMEDIATE SERVICE—FIRST OF AMERICAN FORCES SENT TO EUROPE—DEADLIEST FOE OF U-BOATS, THEY SAILED VAST AREAS, PROTECTING TROOPS AND CARGOES—256 ATTACKS ON SUBMARINES—"FANNING" SANK U-58 AND CAPTURED CREW—NO RANK IN SACRIFICE OR HONORS.

"FIT out for long and distant service!" was the order the Eighth Destroyer Division received from the flagship of the Atlantic Fleet the night of April 14, 1917. It was then 9:30 p. m., and they were directed to sail at daylight. At five o'clock next morning they started for their home navy yards.

Speeding to New York and Boston, the ships went into drydock, made repairs, tuned up machinery, and took aboard three months' stores and provisions—all in ten days.

Sailing from Boston April 24th, under sealed orders, it was not until midnight, when they were fifty miles at sea, that the officers of the flotilla knew its destination. Breaking the seal, the commander read the following, the first operating order issued to any American force:

NAVY DEPARTMENT

OFFICE OF NAVAL OPERATIONS

Washington, D. C., April 14.

SECRET AND CONFIDENTIAL.

To: Commander, Eighth Division, Destroyer Force, Atlantic Fleet; U. S. S. *Wadsworth*, flagship.

Subject: Protection of commerce near the coasts of Great Britain and Ireland.

1. The British Admiralty have requested the coöperation of a division of American destroyers in the protection of commerce near the coasts of Great Britain and France.

2. Your mission is to assist naval operations of Entente Powers in every way possible.

3. Proceed to Queenstown, Ireland. Report to senior British naval officer present, and thereafter coöperate fully with the British Navy. Should it be decided that your force act in coöperation with French naval forces, your mission and method of coöperation under French Admiralty authority remain unchanged.

Route to Queenstown: Boston to latitude 50 N., Long. 20 W., to arrive at daybreak, then to latitude 50 N., Long. 12 W., thence to Queenstown.

When within radio communication of the British naval forces off Ireland, call GCK and inform the Vice Admiral at Queenstown in British general code of your position, course, and speed. You will be met outside of Queenstown.

4. Base facilities will be provided by the British Admiralty.

5. Communicate your orders and operations to Rear Admiral Sims at London and be guided by such instructions as he may give you. Make no report of arrival to Navy Department direct.

JOSEPHUS DANIELS.

Signed only three days after the conference with British and French admirals in Washington, this put into effect the verbal orders given the moment they requested that one or two destroyers be sent. Six were on the way—the *Wadsworth, Conyngham, Porter, McDougal, Davis* and *Wainwright.* They were the first of the United States forces despatched to Europe, the pioneers of the large fleet we sent across the Atlantic.

It was no smooth voyage they had in that long trip. Caught in a southeast gale which lasted for seven days, they were so tossed about by the heavy seas that they could not even set the mess-tables. "We ate off our laps," one officer remarked. But the welcome received when they reached port more than made up for these hardships. Nearing the coast, the ninth day out, a British destroyer, the *Mary Rose,* was sighted, flying the international signal, "Welcome to the American colors!"

"Thank you, we are glad of your company," the Americans replied.

Next morning, Friday, May 4th, they reached Queenstown. Though efforts had been made to keep secret their coming, the American flag floated from public buildings, business houses and residences, and from vessels in the harbor. Crowds as-

sembled on the hills and along the shore, cheering as the ships from over the sea hove in sight.

It was a brilliant scene, flooded with sunshine—a historic day, marking the arrival of the first American forces to take part with the Allies in the struggle against the Central Powers. Through cheering crowds the Navy boys proceeded to the American Consulate, where the lord mayors of Queenstown and Cork extended a formal welcome. Sir John Jellicoe, First Sea Lord of the British Admiralty, in a letter to Commander J. K. Taussig, in command of the flotilla, offered the "warmest welcome possible in the name of the British nation and the British Admiralty," concluding: "May every good fortune attend you, and speedy victory be with us."

Vice Admiral Sir Lewis Bayly, Commander-in-Chief of the Coasts of Ireland, invited the destroyer commanders to dine with him that evening, closing his invitation with the characteristic note: "Dine in undress; no speeches." Able and energetic, he was known as a "hard driver"; a man of few words who hated talk and demanded results.

"When will you be ready to go to sea?" was about the first question he asked. He naturally supposed that, after a long and stormy voyage, they would ask some time for rest and repairs.

"We are ready now, sir," Commander Taussig replied; "that is, as soon as we finish refueling."

"I will give you four days from the time of arrival," the Admiral said. "Will that be sufficient?"

"Yes," was the answer, "that will be more than ample time."

Four days later they were all at sea, hunting submarines. Before the month was out they were swearing by Admiral Bayly, and he was calling them "my boys."

"Things were looking black," Commander Taussig said. "In the three previous weeks the submarines had sunk 152 British merchant ships. The night before we entered the harbor a German submarine had planted twelve mines right in the channel. Fortunately for us they were swept up by the ever vigilant British mine-sweepers before we arrived. The day following our arrival, one of the British gunboats from our station

was torpedoed and her captain and forty of her crew were lost. Patrol vessels were continually bringing in survivors from the various ships as they were sunk."

The convoy system had not then been instituted, the British depending on patrol. This was trying duty, searching for the U-boat that might be anywhere within four or five hundred square miles, for the ocean was strewn with wreckage for three hundred miles from shore.

The Queenstown "area" comprised twenty-five thousand square miles, and yet this wide zone of trans-Atlantic shipping, west and south of Ireland, had been left almost unprotected. "Sometimes only four or five British destroyers were operating in this great stretch of waters," said Admiral Sims, "and I do not think the number ever exceeded fifteen."

Soon after the Americans arrived, the few British destroyers at Queenstown were withdrawn. Urging the sending of all floating craft available, Sims had informed us in his cablegram of April 28th:

> Yesterday the War Council and Admiralty decided that coöperation of twenty-odd American destroyers with base at Queenstown would no doubt put down the present submarine activity which is dangerous and keep it down. The crisis will be passed if the enemy can be forced to disperse his forces from this critical area.

Within a month twenty-eight destroyers and two tenders were either in Queenstown or on the way there. On May 17th a second division arrived, followed by two other divisions, and two additional destroyers and the tenders *Melville* and *Dixie*. The *Melville,* which arrived May 22nd, was the "mother ship" and became the flagship of the United States forces stationed there. On June 1st, Sims wrote to the Navy Department:

> It is gratifying to be able to report that the operations of our forces in these waters have proved not only very satisfactory, but also of marked value to the Allies in overcoming the submarine menace. The equipment and construction of our ships have proved adequate and sufficient and the personnel has shown an unusually high degree of enthusiasm and ability to cope with the situation presented.

As a special compliment to the American Navy, Admiral Sims had been invited, a few days before, to assume command

at Queenstown in the absence of Admiral Bayly on a brief vacation, and for several days the American flag floated from Admiralty House. "So far as exercising any control over sea operations was concerned, this invitation was not particularly important," said Admiral Sims. "Matters were running smoothly at the Queenstown station; Admiral Bayly's second in command could have kept the machine in working order; it was hardly likely in the few days that I was to command that any changes in policy would be initiated. The British Admiralty merely took this way of showing a great courtesy to the American Navy, and of emphasizing to the world the excellent relations that existed between the two services."

In his book, "The Victory at Sea," Admiral Sims said:

> One day Admiral Bayly, Captain Pringle of the *U. S. S. Melville,* Captain Campbell, the Englishman whose exploits with mystery ships had given him world-wide fame, and myself, went out on the *Active* to watch certain experiments with depth-charges. It was a highly imprudent thing to do, but that only added to the zest of the occasion from Admiral Bayly's point of view.
>
> "What a bag this would be for the Hun," he chuckled. "The American Commander-in-Chief, the British admiral commanding in Irish waters, a British and an American captain."
>
> In our mind's eye we could see our picture in the Berlin papers, four distinguished prisoners standing in a row.

The destroyers which escorted the first troop convoys were, after they reached St. Nazaire, sent to the base in Ireland. By July 5th we had thirty-four destroyers at Queenstown. Thirty-seven vessels of the Force—35 destroyers and two tenders—had been sent to Europe, as follows:

Destroyers and Date of Sailing	Commanding Officer
Wadsworth—April 24	Lt. Comdr. J. K. Taussig
Conyngham—April 24	Lt. Comdr. A. W. Johnson
Porter—April 24	Lt. Comdr. W. K. Wortman
McDougal—April 24	Lt. Comdr. A. P. Fairfield
Davis—April 24	Lt. Comdr. R. F. Zogbaum
Wainwright—April 24	Lt. Comdr. F. H. Poteet
Rowan—May 7	Lt. Comdr. C. E. Courtney
Tucker—May 7	Lt. Comdr. B. B. Wygant
Cassin—May 7	Lt. Comdr. W. N. Vernou
Ericsson—May 7	Lt. Comdr. C. T. Hutchins
Winslow—May 7	Lt. Comdr. N. E. Nichols

Destroyers and Date of Sailing	Commanding Officer
Jacob Jones—May 7	Lt. Comdr. D. W. Bagley
Melville (tender)—May 11	Commander H. B. Price
Cushing—May 15	Lt. Comdr. D. C. Hanrahan
Nicholson—May 15	Lt. Comdr. B. A. Long
Sampson—May 15	Lt. Comdr. B. C. Allen
Cummings—May 15	Lt. Comdr. G. F. Neal
Benham—May 15	Lt. Comdr. J. B. Gay
O'Brien—May 15	Lt. Comdr. C. A. Blakely
Patterson—May 21	Lieut. J. H. Newton
Warrington—May 21	Lieut. I. F. Dortch
Drayton—May 21	Lieut. D. L. Howard
Jenkins—May 21	Lieut. W. H. Lee
Paulding—May 21	Lieut. J. S. Barleon
Trippe—May 21	Lieut. R. C. Giffen
Sterrett—May 23	Lieut. G. W. Simpson
Walke—May 23	Lieut. C. F. Russell
Jarvis—May 25	Lieut. L. P. Davis
Perkins—May 25	Lieut. F. M. Knox
Dixie (tender)—May 31	Commander J. R. P. Pringle
Burrows—June 14	Lieut. H. V. McKittrick
Fanning—June 14	Lieut. A. S. Carpender
Allen—June 14	Commander S. W. Bryant
Wilkes—June 14	Lt. Comdr. J. C. Fremont
Ammen—June 17	Lieut. G. C. Logan
Shaw—June 17	Lt. Comdr. M. S. Davis
Parker—June 17	Lt. Comdr. H. Powell

Others were sent as they became available, and new destroyers, in course of construction when war began, were dispatched to Europe upon completion. All but two of the destroyers we had in April, 1917, served in foreign waters. We also sent to Europe nine of the old type later designated as "coast torpedo vessels"—the *Bainbridge, Barry, Chauncey, Dale, Decatur, McDonough, Stewart, Truxtun* and *Worden*—and, old and small as they were, they did excellent service. Eighty-five destroyers, in all, saw service in the "war zone."

Hunting U-boats, going to the relief of vessels attacked, rescuing survivors, and later, when the convoy system was put into effect, escorting vessels—troop and supply ships, passenger steamers and merchantmen—through the danger zones to and from port, the destroyers had plenty to do.

Finding a "sub" was the hardest part of the game, for the mere glimpse of a destroyer through a periscope was sufficient

THE SURRENDER OF THE U-58

The crew of this submarine surrendered to the Fanning, after the destroyer's depth charges had disabled the undersea boat. Inset, the first officer of the U-boat, who traded his Iron Cross for a clean undershirt.

CREW OF THE FANNING, WHICH SANK THE U-58

The star on the funnel indicates a submarine victim.

for the submarine to submerge and scurry away. Yet our vessels in European waters were credited with 256 attacks on U-boats, and there were not a few exciting encounters.

No more striking example of prompt action and quick results occurred during the entire war than that of the *Fanning* and the *Nicholson* when they "got" a German submarine, the U-58, on November 17, 1917. Sailing along with a convoy, at 4:10 p. m. Coxswain David D. Loomis, lookout on the *Fanning*, caught a glimpse of a periscope. It was a finger periscope, a tiny thing an inch and a half in diameter, no larger than a walking stick. It was lifted for only a few seconds, but the keen eyes of Loomis spied it, and he estimated its distance and location—three points on the port bow, 400 yards distant, moving across the bow at two knots' speed. The *Fanning* headed for the spot, full speed, and as it crossed the course dropped a depth-bomb. Changing course, the *Nicholson* was dashing across to drop another charge when the conning tower appeared. The *Nicholson* headed for the submarine, and the *Fanning* turned in her wake to attack. Dropping a depth-charge alongside the U-boat, the *Nicholson* turned, firing from her stern gun. The sub's bow came up rapidly. She seemed to be down by the stern and was evidently badly damaged, but tried to right herself and increased her speed. As the *Nicholson* cleared, the *Fanning* opened fire with her bow gun. At the third shot the German crew came on deck, and held up their hands shouting, "Kamerad!" At 4:28 the submarine surrendered. It had been only 18 minutes since Loomis had sighted her periscope.

Getting a line to the crippled craft, the destroyers prepared to take it in tow. But two of her crew disappeared for a moment. They scuttled the boat. As it sank, the Germans jumped into the water and swam for the *Fanning*. Heaving lines were thrown to them, and all but one, Franz Glinder, managed to get aboard. When it was seen that he was sinking, two of the *Fanning's* crew, Chief Pharmacist's Mate Elzer Harwell and Coxswain Francis G. Connor, jumped overboard to rescue him. They got him aboard the ship, but in spite of all efforts to resuscitate him, he died.

The commander, Kapitän-Leutnant Gustav Amberger, his three other officers and thirty-five men were prisoners. They

were given hot coffee, sandwiches and cigarettes, and men of the *Fanning* loaned their warm clothing. No prisoners were ever better treated. As they entered the boats that were to take them ashore, they cheered the *Fanning* and its crew.

A larger volume than this would be required to detail all the exploits of our destroyers in European waters, or even to give the reports of their contacts with submarines. But a few examples will give some idea of the work they did.

Not long after her arrival in Queenstown, the *O'Brien* (Lieutenant Commander C. A. Blakely) defeated a U-boat which was trying to attack the British steamer *Elysia,* twelve miles south of Ballycotton Light, off the Irish coast. This encounter occurred at 4:21, June 16, 1917, and the London Headquarters' report of June 20th, said:

> It is reasonably certain now that the *O'Brien* destroyed the submarine mentioned. She was escorting a valuable ship when the two periscopes of a submarine were observed about 800 yards on her bow. She altered course immediately, headed for it, and increased to full speed. The periscopes were again seen about a minute later about 100 yards dead ahead, the submarine having apparently attempted to avoid the *O'Brien* and torpedo her escort astern of her. From the last position sighted, the submarine apparently started to dive, and must have barely escaped being rammed.
>
> The lookout on the top observed her hull distinctly alongside the *O'Brien* and gradually disappearing as she proceeded downward, on almost exactly the opposite course to the *O'Brien.* A depth-charge was dropped when the submarine was under the after deck-house, and although the *O'Brien* was making 20 knots by this time, less than three minutes after the submarine had been sighted, the explosion of the depth-charge gave the ship a very severe shaking. The *O'Brien* circled over the spot, but saw no evidence of damage. A British destroyer passing over the same spot, nearly three hours later found and reported large patches of strong-smelling oil. The *Cushing,* on the following morning, passed the same area and also reported a large amount of oil. This incident occurred just off Queenstown entrance and was unfortunately one of those cases the exact results of which cannot be determined.

The *Trippe, Warrington, Jenkins, Wadsworth, Cummings, Wilkes* and *Benham* all had encounters in July which were not only successful but showed evidence that the U-boats were damaged, if not disabled. The *Parker* (Lieutenant Commander Halsey Powell) on August 3rd had a long U-boat encounter.

With the *Fanning* and *Nicholson,* she had been escorting steamers and had just returned to patrol when a submarine was reported about 30 miles away. Speeding to the locality, at 2:15 she found the steamship *Newby Hall* had been attacked, and was told that the U-boat had submerged probably six miles distant. Escorting the steamer toward port, the *Parker,* at 4:10 p. m. turned her over to the *Burrows,* and returned to look for the "sub." The steamship *Rio Verde,* which was in the vicinity, was escorted out of the dangerous locality, and the destroyer resumed the hunt for the enemy.

At 6:50 the *Parker* sighted the submarine, which submerged when the destroyer came within 8,000 yards. But the U-boat left a long oil slick which the *Parker* followed down. "On reaching the end of the slick, saw submarine underneath the end of the bridge," the commander reported. "Dropped two depth-charges on the submarine and from all evidence she was very probably sunk. There was practically simultaneous explosion of the depth-charges, followed by another explosion. There was discovered on the surface of the water air bubbles, and a heavy scum of oil, and particles of what appeared to be cork." As no wreckage or prisoners were obtained, the Admiralty gave the credit "probably seriously damaged"; but the men aboard the *Parker* were convinced that the submarine had been destroyed.

The *Jacob Jones, Davis* and *McDougal* were credited with successful encounters in September, the *McDougal* being credited in Admiral Sims' Headquarters' report of Sept. 15th, with "protection of two meeting convoys against enemy submarine," and "possible destruction" of the U-boat.

While escorting a New York convoy the *McDougal* (Commander A. P. Fairfield) at 1:21 a. m. sighted the submarine on the surface, and gave chase. The "sub" submerged 500 yards ahead. Dropping two depth-charges, the *McDougal* circled around the spot, and soon noticed oil rising, apparently from the U-boat. A northbound convoy from France to Wales was sighted only a half mile away. "One or more ships of convoy were undoubtedly saved by the fact that the submarine was forced to submerge hastily," said the Headquarters' report. "Submarine believed to be damaged or sunk."

When the large British steamship *Orama* was torpedoed October 19, 1917, the *U. S. S. Conyngham* attacked and drove off the submarine, saving other ships of the convoy. Her commanding officer, Commander A. W. Johnson, made this report:

During the afternoon *Conyngham* hailed *H. M. S. Orama* and suggested that, due to submarine reported ahead, convoy change course. This was not thought advisable by the commanding officer of *H. M. S. Orama* and convoy proceeded on original course.

At 5:30 p. m. *Parker,* in position 48 degrees N. 09-20 W., escort about two miles ahead of convoy, reported sighting discolored water (brownish).

At 5:50 p. m., while *Conyngham* was alongside starboard side of *Orama* passing her recognition signals, a torpedo crossing *Clan Lindsay's* bow struck *H. M. S. Orama* in port side, about No. 3 hold. A distinct report was heard, followed immediately by cloud of smoke arising from *Orama* forward of her bridge. *Orama* listed to port and began to sink by the bow. *Conyngham* by radio ordered convoy to disperse. *Conyngham* sounded general quarters and went full speed ahead and crossed *Orama's* bow by going full left rudder, then proceeded to make circle between VA and VR columns.

When circling, a wake was sighted on starboard quarter. A periscope about one foot emerged visible for few seconds only was seen in this wake. A short time afterwards a periscope was sighted sharp on our starboard bow. This periscope submerged almost immediately, but wake was plainly visible. *Conyngham,* then a few yards from the periscope, headed for same and dropped depth-charge over the wake. An explosion resulted. Large quantities of discolored water was seen to rise in the air and a number of crew and officers distinctly made out a quantity of wreckage, one piece of which might have been the wireless mast of the submarine, when *Conyngham* circled near the spot of the explosion.

The *Jacob Jones* and the *Conyngham* remained by the *Orama* to save life. It was night when the vessel began to settle and was abandoned by her crew. But the destroyers rescued all the 478 persons who were on board the *Orama.*

American destroyers had been operating in European waters six months with no damage from enemy action, when, on October 15th, the *Cassin* (Lieutenant Commander W. N. Vernou) was torpedoed. Her rudder was blown off, a gun blown overboard, and the after part of the ship wrecked; yet by expert seamanship she was kept afloat and taken to port, repaired and put back into service. Nine men of the crew were wounded, but only

one was killed—Gunner's Mate Osmond K. Ingram, who gave his life to save the ship.

Patrolling off the Irish coast, 20 miles south of Mine Head, at 1:30 p. m. the *Cassin* sighted a submarine, but it vanished before the destroyer could get close to it. Half an hour later Commander Vernou sighted a torpedo running at high speed toward the ship. Double emergency full speed was rung, the rudder put hard left, and for a moment it looked as if the torpedo might pass astern. When only fifteen or twenty feet away, it porpoised, leaving the water and sheering to the left; and struck the vessel well aft, on the port side.

When the torpedo was sighted, Ingram, who was at his gun, realized that if it struck among the depth-bombs astern, the explosion might sink the ship. Instantly, he ran aft to strip these charges and throw them overboard. He was blown to pieces when the torpedo struck. The memory of this heroic gunner's mate, who made the supreme sacrifice to save his shipmates, is preserved in the name of one of our new destroyers, the *Ingram,* the first naval vessel ever named for an enlisted man. There is no rank in sacrifice or honors.

The officers and men worked heroically to save the *Cassin.* Her rudder gone, she was moving in circles. Efforts were made to steer by use of the engines, but something carried away and put the starboard engine out of commission. The ship seemed absolutely unmanageable. All was dark below, the electric generator having been disabled. Radio apparatus broken, a temporary auxiliary antenna had to be rigged up before assistance could be summoned by wireless. But the crew were undismayed, the gunners were at their stations, and when, at 2:30 o'clock, a conning tower was sighted, the *Cassin* opened fire. Two shots struck close to the U-boat, which submerged and did not again attempt to attack the crippled ship.

Just before 4 o'clock the *U. S. S. Porter* arrived. At 9 the British ships *Jessamine* and *Tamarisk* appeared on the scene. But the sea was rough, the wind high, and it was not until 2:30 a. m. that a hawser was made fast and the *Tamarisk* started towing the *Cassin.* An hour later the hawser parted. The *Tamarisk,* two trawlers and a tug worked until morning, attempting to get the vessel in tow again. But it was not until

10:37 a. m. that a towing line from the *Snowdrop* was made fast, and the *Cassin* taken to port.

Thirty-five feet of the stern was blown off. Living compartments and store-rooms in the after part of the ship were wrecked or gone. The equivalent of 850 pounds of TNT, in torpedo and depth-charges, had exploded on the *Cassin's* fantail. Twenty-odd men were in the wrecked living compartments when the torpedo exploded. Their escape was almost miraculous. Dazed by the shock, they automatically closed water-tight doors and performed other emergency duties, but could never tell just how they did it or got away. All declared that from the instant of the explosion they were absolutely blinded. Forty-five members of the crew, including the chief petty officers, lost all their belongings except the clothes they had on. But that did not bother them. The ship was saved, they were still alive, and that was happiness enough.

The *Chauncey,* one of our small, old-type destroyers, was rammed and sunk by the steamship *Rose* near Gibraltar at 1:46 a. m., November 19th. Three of the officers—Lieutenant Commander Walter E. Reno, commanding, Lieutenant (junior grade) C. F. Wedderburn, and Ensign H. G. Skinner—and 18 men were lost.

On December 6th, the *Jacob Jones* was sunk, with the loss of two officers—Lieutenant (junior grade) Stanton F. Kalk, of Washington, D. C., and Gunner Harry R. Hood, of Atlanta, Ga. —and 62 men of the crew. The *Jones* was proceeding alone from off Brest to Queenstown when, at 4:21 p. m., a torpedo was sighted rushing toward the ship. The rudder was put hard left, the destroyer put on all its speed, but could not maneuver in time to escape.

Broaching and jumping clear of the water, the torpedo submerged again 50 or 60 feet from the ship, striking in the fuel-oil tank, three feet below the water-line. The deck was blown clear for twenty feet, a number of men were killed; the auxiliary room wrecked, a torpedo-tube thrown into the air, the mainmast and radio apparatus were carried away. The vessel settled aft immediately, and the after deck was awash. The gunnery officer, Lieutenant J. K. Richards, ran aft to set the depth-charges "safe"; but they were already under water. Rafts and

lifeboats were launched, circular lifebelts and splinter masts set adrift to provide floatage for the crew.

The ship went down in eight minutes. Most of the men were on rafts or wreckage, but some were swimming astern of the vessel. Lieutenant Commander David W. Bagley and other officers jumped overboard as the destroyer began to sink. Officers and men bore themselves with great coolness. "Bagley's handling of the situation after his ship was torpedoed," wrote Admiral Sims, "was everything I expected in the way of efficiency, good judgment, courage, and chivalrous action."

Going down stern-first the destroyer twisted through 180 degrees, as she swung upright. As she turned, her depth-charges exploded, killing or stunning the men near by.

Twenty minutes later the submarine appeared, two or three miles distant, then gradually approached and picked up two men from the water, Albert De Mello and John F. Murphy, whom she carried to Germany as prisoners. All the survivors in sight were collected, and rafts and boats gotten together. The ship's radio had been wrecked, preventing the sending out of distress signals. Two shots had been fired from her guns in the hope of attracting some near-by ship, but none was in hearing. There seemed no prospect of assistance except from shore, and leaving Lieutenant Richards in charge of the rafts, Lieutenant Commander Bagley, the ship's commander, and Lieutenant Norman Scott, the navigating officer, with four men, started to row to the nearest land to secure assistance.

Night soon came on, and the men on the rafts prepared for a long vigil. When help would arrive, none could tell. Shivering from cold, shaken by the experience through which they had passed, the survivors kept up their courage with the amazing cheerfulness of the sailor in stress and disaster. Their very lives depending on keeping warm, men who had thick clothing divided it with those more thinly clad. Officers and men shared their belongings and worked together for the common safety.

One small raft, which had been separated from the others, was picked up at 8 p. m. by the steamship *Catalina*. The other survivors remained in their perilous position all night, and it was not until 8:30 o'clock next morning when they were discovered and rescued by the British steamship *Camellia*.

One brave young officer died before relief arrived. Though still suffering from the effects of the explosion, which had stunned him, and weakened by his efforts after the ship sank, Lieutenant Kalk swam from one raft to another to equalize the weight on them. Striving for the safety of his men, he overtaxed his own strength, and died of exhaustion and exposure. Men who were on the raft with him said, "He was game to the last." His courage and self-sacrifice are commemorated in a destroyer that bears his name.

There was no other serious damage to destroyers until March 19, 1918, when a British vessel collided with the *Manley.* The collision exploded the depth-charges on her decks, killing Lieutenant Commander Richard McC. Elliot, of New York, and 33 enlisted men, and injuring 22 others. The *Manley,* though badly damaged, was gotten to port and repaired.

The destroyers never halted in their warfare on the submarines, and many encounters were reported in the early part of 1918, probably the most notable being those of the *Allen,* Feb. 2d; the *Reid,* March 18th; the *Isabel;* the *Stewart,* April 23; the *Porter,* April 28; the joint attack of the *Patterson, Beale, Burrows* and *Allen* on May 19th, and that of the *Sterrett* on June 1st. All these were given official credits by the British Admiralty, which also gave the *Tucker* (Lieutenant Commander W. H. Lassing), which bombed and sent down a U-boat on August 8th, the credit "possibly sunk."

The armed yachts, the subchasers and all the rest played well their parts. But after all it was the gallant destroyers which did most to combat the submarine menace. At sea two-thirds of the time, they escorted thousands of vessels in and out of European ports. Some of them made astounding records. The first year after we entered the war at least three, the *Porter, Davis* and *Conyngham,* steamed nearly 65,000 miles each, over twice the distance around the globe, while the *Caldwell* for some time averaged 8,500 miles a month, over 280 miles a day. No class of ship, big or little, ever excelled these records.

Commander Byron McCandless, who commanded the *Caldwell,* went to Mare Island Navy Yard not long after her keel was laid, and banged away so persistently to get his ship finished that the workmen called him "Captain Bing-Bang." It was

completed in quick time, and for its trial trip made a record run from San Francisco through the Panama Canal to Hampton Roads, going thence across the Atlantic and into service in the war zone.

There were many stories of the destroyers' efficiency, and one told me by a gentleman on his return from Europe impressed me particularly. Making its way across the North Atlantic, a convoy of troop-ships was still some three hundred miles from land when a voyager, who was making his first trip across, remarked: "All you can hear about nowadays is the Navy. It is the Navy this, the Navy that; but as far as I can see, the Navy is not doing much in this war."

One of the civilians in the party who had a son in the Navy, rose to his feet, pulled out his watch and said: "In ten minutes six United States destroyers will meet this convoy."

"What are you talking about?" asked the voyager. "How do you know?"

"Well," was the confident answer, "it is now 4:05 o'clock. The destroyers are ordered to meet this convoy at 4:15, and they will be on time."

The party went out on deck to watch, and on the minute, at 4:15, destroyers hove in sight. Swinging into line, on each side of the convoy, the saucy little vessels, heaving foam and spray from bow to stern, spanked along through the heavy seas.

"Good heavens!" exclaimed the doubting Thomas, "if these little destroyers can come three hundred miles to sea in any kind of weather, keep their schedule, and locate a convoy on the dot, I will believe anything I hear regarding the Navy." That's just an example of the way our destroyer boys went at the job, and they kept it up until the last horn blew.

Their skill in navigation, in locating convoys or vessels in distress or boats containing survivors was positively uncanny. When the *President Lincoln* was sunk five hundred miles at sea, the *Smith* and the *Warrington,* two hundred and fifty miles away, hurried to the rescue. A wireless message stating the locality was all they had to steer by. It was 11 p. m. when they arrived. Boats and rafts had drifted fifteen miles. But so accurately had the destroyer officers estimated the drift that in the darkness they almost ran into the rafts!

American destroyers at Brest operated under direct command of Admiral Wilson and those at Gibraltar under command of Admiral Niblack. Though operating under Admiral Bayly and subject to his orders, our Destroyer Force at Queenstown had its own organization. The chief-of-staff was Captain J. R. P. Pringle, whose ability and untiring energy won the respect and regard of British and Americans alike. The senior commander was Commander David C. Hanrahan, of the *Cushing,* whose enterprise and energy were a fine example to his juniors.

The splendid work done by our vessels, the excellent condition in which they were maintained, the superb morale of the entire force, called for the highest praise. A year after the arrival of the first group, Admiral Bayly issued the following order:

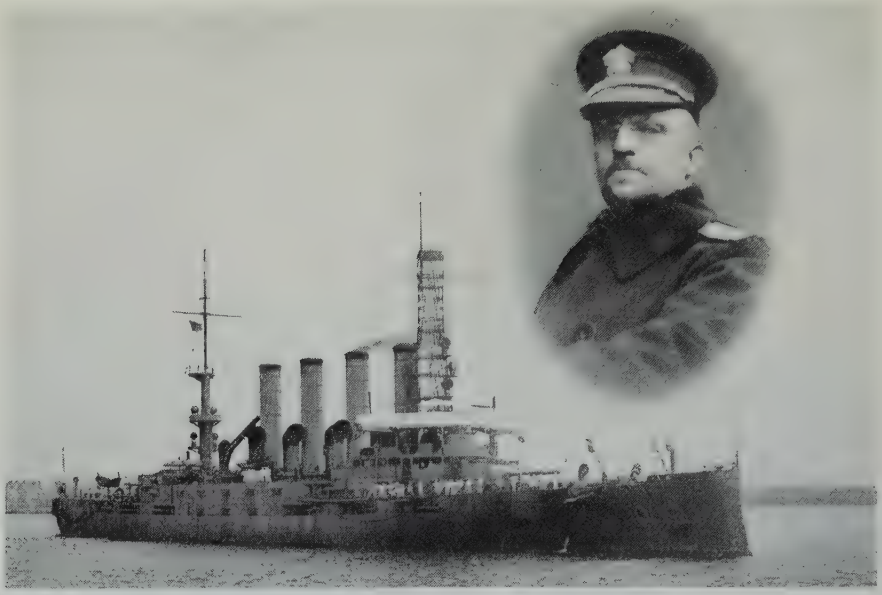
> On the anniversary of the arrival of the first United States men-of-war at Queenstown, I wish to express my deep gratitude to the United States officers and ratings for the skill, energy and unfailing good nature which they have all consistently shown and which qualities have so materially assisted in the war by enabling ships of the Allied Powers to cross the ocean in comparative freedom.
>
> To command you is an honor, to work with you is a pleasure, to know you is to know the best traits of the Anglo-Saxon race.

A thrilling example of the courage, quick decision and prompt action that characterized the Destroyer Force was that of the *Shaw* October 9, 1918. Escorting the British transport *Aquitania,* the *Shaw* was just completing the right leg of a zig-zag that brought her close to the convoy, when her rudder jammed. As the huge transport turned, the destroyer was aimed straight toward her side. Commander William Glassford, captain of the *Shaw,* saw that a collision was inevitable. Either destroyer or transport would be sacrificed. If the sharp-prowed *Shaw* struck the *Aquitania,* the big troop-ship, with eight thousand men aboard, might be ripped and sunk, with heavy loss of life.

Glassford decided instantly to sacrifice his own ship. Unable to turn it aside, he gave the order, "Full speed astern!" A moment later, the *Aquitania* struck the destroyer and sliced her almost in two, passing through her without even slowing speed. Striking just forward of the bridge, the *Aquitania* cut off ninety

THEY, TOO, WERE READY

Above, a view through the stern of the Cassin after she had been hit by a torpedo; although crippled, she continued the search for the submarine. Inset, Gunner's Mate Osmond K. Ingram, who gave his life to save the Cassin. Below, the U. S. S. Shaw alongside deck after her collision with the Aquitania.



THE SEATTLE AND REAR ADMIRAL ALBERT GLEAVES

The Commander and Flagship of the Cruiser and Transport Force.

From the painting by Burnett Poole

A DASH THROUGH THE DANGER ZONE

The Leviathan, largest of the transports, escorted by the Kimberly.

feet of the *Shaw's* bow and raked the whole length of her side, stripping open the forward boiler room, and tearing out the mainmast, which, in falling, jammed the starboard engine. Sparks ignited the oil in the forward tank, setting fire to the vessel. The *Duncan* and the *Kimberly* went to her assistance, the *Kimberly* rescuing the survivors in the bow, which was floating two hundred yards from the remainder of the ship.

That the vessel kept afloat at all seemed remarkable; to get her to port appeared almost impossible. But those brave men of the *Shaw* put out the fire, in the face of bursting ammunition. They rigged up her engines and got them working again, and repaired the steering gear. And they navigated that remnant of a ship to port, reaching Portland at 1:30 in the afternoon. Two of her officers and ten men of her crew were dead, killed in the collision. Three officers and twelve men were injured. Her bow and most of the forward part of the ship was gone. But what was left of her was taken to a shipyard, and a new forward part was built. Some months afterwards, on a visit to Portsmouth, England, where she was repaired, I saw her again in commission, doing splendid service in the Navy.

Could there be a better tribute than that to the staunchness of our destroyers and the undying spirit and superb efficiency of their officers and men?

CHAPTER VIII

RACE BETWEEN WILSON AND HINDENBURG

BIGGEST TRANSPORTATION JOB IN HISTORY—TWO MILLION TROOPS CARRIED 3,000 MILES OVERSEAS—FIRST CONVOYS ATTACKED BY U-BOATS—NO AMERICAN TROOP-SHIP SUNK, NOT ONE SOLDIER ABOARD LOST THROUGH ENEMY ACTION, ON THE WAY TO FRANCE—NAVAL TRANSPORTS TOOK 911,000 TO EUROPE, BROUGHT HOME 1,700,000—U. S. NAVY PROVIDED FOUR-FIFTHS OF ESCORTS.

"WHAT was the greatest thing America did in the World War?" That is a question I have often been asked, and it is easily answered. It was the raising and training of an army of 4,000,000 men, a navy of over 600,000, and the safe transportation of more than two million troops to Europe. And all this was accomplished in eighteen months.

When the issue hung in the balance, in the spring of 1918, Lloyd George said: "It is a race between Wilson and Hindenburg." Could America land enough soldiers in France in time to check the German offensive? That was the one vital question.

Carrying the American Expeditionary Force across the Atlantic and bringing our troops home has been justly termed the "biggest transportation job in history." Sailing through submarine-infested seas, they constantly faced the menace of attack from an unseen foe, as well as the perils of war-time navigation. Yet not one American troop-ship was sunk on the way to France, and not one soldier aboard a troop transport manned by the United States Navy lost his life through enemy action.

That achievement has never been equalled. It was not only the most important but the most successful operation of the war. The Germans never believed it could be done.

When Rear Admiral Albert Gleaves, commander of the Cruiser and Transport Force, came to Washington for his final instructions, just before the first troop convoys sailed for Europe, as he was leaving my office, I said to him:

Admiral, you are going on the most important, the most difficult, and the most hazardous duty assigned to the Navy. Good bye.

That was not overstating it in any particular. No nation in history had ever attempted to transport so huge an army overseas. It would have been difficult enough under the most ideal conditions, with nothing to hinder or molest.

The German navy could have no greater object than to prevent our troops from getting to France. There could have been no greater victory for them than to have sunk a transport loaded with American soldiers. Words can hardly express the strain of those anxious days when our first transports were running the gauntlet to France; or our relief when we received the news that they had all arrived safely at St. Nazaire.

Sailing in a dense fog on June 14, 1917, the first group arrived on June 26th; the last, the cargo ships, on July 2nd. The first group, Gleaves reported, was attacked by submarines the night of June 22nd, at 10:15 p. m.; the second group encountered two, and a torpedo was fired at the fourth group on June 28th. That they had escaped the submarines was an added cause for rejoicing. Not a ship was damaged or a man injured, and an officer reported: "We didn't lose but one horse, and that was a mule."

"The German Admiralty had boasted that not one American soldier should set foot in France," Gleaves said. "The bluff had been called, and it could not have been called at a more psychological moment."

The question of the hour had been successfully answered; France, as well as America, celebrated the event in a very delirium of rejoicing. This was the beginning of that vast stream of troops and supplies that poured across the Atlantic until the Germans were overwhelmed.

Getting that first group of transports together was a job. The army had only a few troop-ships, none of them fitted for trans-Atlantic service. The Navy had only three—the *Hender-*

son, just completed; the *Hancock,* and the former German commerce raider, *Prince Eitel Friedrich,* which we converted into an auxiliary cruiser and renamed the *DeKalb.* The Army secured fourteen mail and cargo steamships, and hastily converted them. It had to be quick work. We had not contemplated sending troops so soon. From a military standpoint it would have been better, many experts in this country and Europe held, to have retained the regulars for a while to aid in training the new officers and raw recruits, and not to have begun transportation until we had a larger army.

But war-weary France, grimly holding back the Germans, and England, beset by submarines, needed cheering up; needed visible evidence that reënforcement was certain, that the Americans were coming. Marshal Joffre asked that some troops be sent at the earliest possible moment—"a regiment or two, if possible a division." He told Secretary Baker that he looked forward to the day when the United States should build up its "splendid army of 400,000 or 500,000." What must he have thought when he saw an American army of 4,000,000 men, with two millions of them in France! He appreciated the necessity, he said, of retaining the regulars to train the new army, and knew that few could be spared. But the very sight of American troops on French soil, of our men marching through the streets of Paris, would be a tremendous inspiration to all France. The wise old Marshal was right.

Secretary Baker immediately began his preparations to send troops. When he told Congress he would have an army of 500,000 men in France in the summer of 1918, a leading senator declared it was "impossible." It was impossible to those without vision. But the Secretary of War's figures were increased three-fold.

General Pershing was chosen to command the forces to be sent to Europe, and was summoned from the Mexican border. He arrived in Washington May 10th. Preparations were already under way by both Army and Navy. Officers of both services were working out in detail the system by which they were to secure ships and coöperate in transportation.

I selected Gleaves, then in command of our destroyer force, to direct the troop transportation, and I never had reason to

regret this choice. No man could have done a big job better; no job was ever better done. On May 23, he was summoned to Washington and informed that he had been chosen to command the first expedition to France.

General Pershing and his staff sailed May 28th on the *Baltic* and arrived at Liverpool June 8, reaching France at Boulogne, June 13th. The troop convoys sailed from New York the next day. Admiral Gleaves, on his flagship, the cruiser *Seattle,* was in command. The vessels were arranged in four groups, which sailed six hours apart:

Group 1—Transports: *Saratoga, Havana, Tenadores, Pastores.* Escort: *Seattle,* armored cruiser; *DeKalb,* auxiliary cruiser; *Corsair,* converted yacht; *Wilkes, Terry, Roe,* destroyers.

Group 2—Transports: *Henderson, Momus, Antilles, Lenape.* Escort: *Birmingham,* scout cruiser; *Aphrodite,* converted yacht; *Burrows, Fanning, Lamson,* destroyers.

Group 3—Transports: *Mallory, Finland, San Jacinto.* Escort: *Charleston,* cruiser; *Cyclops,* fuel ship; *Allen, McCall, Preston,* destroyers.

Group 4—Transports: *Montanan, Dakotan, El Occidente, Edward Luckenbach.* Escort: *St. Louis,* cruiser; *Hancock,* cruiser transport; *Shaw, Parker, Ammen, Flusser,* destroyers.

No convoy that ever sailed had a stronger escort or was more closely guarded. Their protection was our supreme duty. Before they left, I cabled Admiral Sims: "I hereby instruct you to furnish escorts, to consist of one division of destroyers for each convoy group from the point of meeting to the point of debarkation."

Submarines were reported operating in the area that had to be crossed. Three of the groups encountered U-boats, Admiral Gleaves reported, and Admiral Sims cabled on June 30th, "First group attacked by submarines, longitude 25 degrees 30, before arriving at first rendezvous; second group attacked longitude 8"; and the next day he cabled: "It is practically certain that enemy knew position of the first rendezvous and accordingly sent a submarine to intercept before juncture with destroyers."

About 10:15 p. m., June 22, the officer of the deck and others on the bridge of the *Seattle,* which was leading the first group,

saw a white streak about 50 yards ahead of the ship, crossing from starboard to port. The cruiser was immediately run off 90 degrees to starboard at full speed. The officer of the deck said, "Report to the admiral a torpedo has just crossed our bow." General alarm was sounded, torpedo crews being already at their guns. When Gleaves reached the bridge, the *DeKalb* and one of the transports astern had opened fire, the former's shell fitted with tracers. Other vessels of the convoy turned to the right and left. The destroyer *Wilkes* crossed the *Seattle's* bow at full speed and turned toward the left column in the direction of the firing.

Two torpedoes passed close to the *DeKalb* from port to starboard, one about 30 yards ahead of the ship and the other under her stern, as the ship was turning to the northward. Captain Gherardi stated that at 10:25 the wake of a torpedo was sighted directly across the *DeKalb's* bow. A second torpedo wake was reported ten minutes later by the after lookouts.

The torpedoes fired at the *Havana* passed from starboard to port about 40 yards ahead of the ship, leaving a distinct wake which was visible for 400 or 500 yards.

The submarine sighted by the *Seattle* was seen by the *Wilkes* and passed under that ship, Lieutenant Van Metre reported, stating that the oscillator gave unmistakable evidence of the presence of a submarine. The radio operator at the receiver reported, "Submarine very close to us." As the U-boat passed, it was followed by the *Wilkes,* which ran down between the columns, chasing the enemy.

The *Birmingham,* leading the second group, encountered two submarines, the first about 11:50 a. m., June 26, in latitude 47° 01′ N. longitude 06° 28′ W., about a hundred miles off the coast of France, and the second two hours later. The *Wadsworth* investigated the wake of the first without further discovery. The *Cummings* sighted the bow wave of the second at a distance of 1,500 yards, and headed for it at a speed of 25 knots. The gun pointers at the forward gun saw the periscope time and again, but as the ship was zigzagging, it disappeared each time before they could fire at it. The *Cummings* passed about 25 yards ahead of a mass of bubbles which were coming up from the wake and let go a depth-charge just ahead. Several

pieces of timber, quantities of oil, bubbles and debris came to the surface. Nothing more was seen of the submarine. The attacks on the second group occurred about 800 miles to the eastward of where the attacks had been made on the first group.

The voyage of the third group, Admiral Gleaves reported, was uneventful; but the *Kanawha*, with the fourth group, on June 28th, fired on what was believed to be a submarine. The *Kanawha's* commander saw the object; and a minute or two later the port after gun's crew reported sighting a submarine, and opened fire. The lookouts said they saw the U-boat under the water's surface, about where the shots were landing. Lieutenant (junior grade) Lee C. Carey, in charge of the firing, reported that he saw the submarine fire two torpedoes in the direction of the convoy, which sheered off when the alarm was sounded. "All the officers and men aft had observed the torpedoes traveling through the water and cheered loudly when they saw a torpedo miss a transport," reported the *Kanawha's* commander.

When he was in Paris Admiral Gleaves was shown a confidential bulletin of information issued by the French General Staff, dated July 6, which contained the following:

> Ponta Delgada was bombarded at 9 a. m., July 4. This is undoubtedly the submarine which attacked the *Fern Leaf* on June 25, four hundred miles north of the Azores and sank the *Benguela* and *Syria* on the 29th of June 100 miles from Terceira (Azores). This submarine was ordered to watch in the vicinity of the Azores at such a distance as it was supposed the enemy American convoy would pass from the Azores.

"It appears from the French report just quoted above and from the location of the attack that enemy submarines had been notified of our approach and were probably scouting across our route," Gleaves said.

On the evening of July 3rd, I had the pleasure of announcing the safe arrival of all our convoys, without the loss of a man. This occasioned general rejoicing in France, England and Italy, as well as America. For us, the national holiday that followed was truly a glorious Fourth. Secretary Baker wrote the thanks of the Army, adding: "This splendid achievement is an auspicious beginning, and it has been characterized throughout by

the most cordial and effective coöperation between the two military services." In replying, "in behalf of the men whose courage gave safe conduct to courage," I said that the Navy waited "in full confidence for the day when the valor of your soldiers will write new and splendid chapters in the history of our liberty-loving land."

The policy of the Department, with reference to the safety of ships carrying troops to France, was laid down in this cablegram which I wrote with my own hand:

Washington, D. C., July 28, 1917.

Admiral Sims:

The paramount duty of the destroyers in European waters is principally the proper protection of transports with American troops. Be certain to detail an adequate convoy of destroyers and in making the detail bear in mind that everything is secondary to having a sufficient number to insure protection to American troops.

JOSEPHUS DANIELS.

From the small beginning was built up the great Cruiser and Transport Force which took to France 911,047 American soldiers, and brought home 1,700,000—a total of 2,600,000 carried across the Atlantic in naval transports. In less than a year this Force grew to a fleet of 83 vessels, and after the armistice comprised 142 vessels carrying troops, with facilities for 13,914 officers and 349,770 men. Rear Admiral Gleaves' headquarters were at Hoboken, N. J., where most of the transports docked. His chief of staff was Captain De W. Blamer. The Newport News Division was commanded by Rear Admiral Hilary P. Jones, now commander-in-chief of the Atlantic Fleet, with Captain J. F. Hines as his chief of staff.

Of the 194,965 troops which sailed before the end of 1917, 113,429 were carried in American vessels, all but 8,535 of these in our transports; and 75,500 were taken in British ships. In January, February and March, 1918, British vessels carried 57,399; U. S. naval transports, 123,917. Foreign shipping in large quantity did not become available until after the famous "March drive" made by the Germans in 1918. Then the most important thing to all the Allies was getting American soldiers to Europe, and British, French and Italian ships in numbers were furnished. In April, 1918, 67,553 sailed in U. S. trans-

ports, 47,362 in British ships. In May the British carried more than we did, 133,795 to our 99,561, besides 12,127 carried in Italian vessels leased by the British. In the next five months up to the armistice, 520,410 were carried in U. S. naval transports, and 28,973 in other American ships; British vessels carried 692,931; British-leased Italian ships 53,493 and French, Italian and other foreign ships, 38,218.

The records of the Cruiser and Transport Force show that, in all, 2,079,880 American troops were transported to France before the armistice—952,581 in American vessels, 911,047 of these in U. S. naval transports; 1,006,987 in British ships; 68,246 in British-leased Italian vessels; 52,066 in French, Italian and other foreign ships. American vessels carried 46.25 per cent, 43.75 of this in U. S. Naval transports; British vessels 48.25 per cent; British-leased Italian ships, 3 per cent; French, Italian and others, 2.5 per cent.

The purely naval duty was escorting these vessels, guarding them against attack by raiders or submarines. Of this the British navy performed 14.125 per cent, the French 3.125, and the United States Navy 82.75 per cent, over four-fifths. Of the total number of troops, 61,617 were under French escort, 297,903 under British escort, and 1,720,360 sailed under the escort of the United States Navy.

But that is only half the story. When hostilities ended, that vast army had to be brought back from Europe. For this, very little foreign shipping was available. Of the 1,933,156 Americans returned from November 11, 1918, to the end of September, 1919, the Navy brought home 1,675,733; all other vessels, American and foreign, 257,423. During hostilities we had returned 11,211 sick, wounded, casuals, etc.; some were returned after September, so that the total number brought by the Navy from Europe to America ran well over 1,700,000.

Of the total troop and official passenger movement incident to the war, approximately 4,000,000, the Navy transported more than 2,600,000. Not only did the Navy man and operate the United States transports, but provided the food for this vast army of soldiers en route. And during the entire war period, four-fifths of all the American troops who sailed were guarded by American cruisers, destroyers and patrol craft.

This country could not have sent over nearly so many troops as it did, if we had not been aided by the British, French and Italian vessels. This was no gift, of course. The United States Government paid for every soldier transported on a foreign vessel. The aid of our Allies was invaluable, and highly appreciated. They should be given full credit for all they did; but this should not detract one iota from the great task performed by our Navy, which was the biggest factor in putting through this biggest job of the war.

Not a single vessel of the Cruiser and Transport Force was torpedoed on the way to France. Two, the *President Lincoln* and the *Covington,* were sunk returning, as was also the *Antilles,* an Army chartered transport not manned by the Navy. Two American transports were torpedoed, the *Finland,* manned by a civilian crew, and the *Mount Vernon,* manned by the Navy; but both were successfully navigated to port and repaired. The *Tuscania* and the *Moldavia,* sunk while carrying American troops to Europe, were British chartered vessels, as was also the *Dwinsk,* which was sunk while returning.

The first transport lost was the *Antilles,* October 17, 1917, two days out of Brest. Eleven days later the *Finland* was struck by a torpedo. In both cases there was loss of life and confusion among the civilian crews. After these experiences, it was decided to man all American troop-ships entirely by naval personnel; and it was not until May 31st that another was lost.

Returning to America, in company with the *Susquehanna, Antigone* and *Rijndam,* the *President Lincoln* (Commander P. W. Foote), was steaming along, 500 miles from land. At 9 o'clock a terrific explosion occurred on the port side of the *Lincoln,* 120 feet from the bow. In an instant there was another explosion in the after part of the vessel. The ship had been struck by three torpedoes, fired in a salvo from a submarine. Two struck together near the bow, the other near the stern. Officers and lookouts had sighted the wakes, but the torpedoes were so close that it was impossible to avoid them.

There were 715 persons on board, including 30 officers and men of the army, a number of whom were sick, two helpless from paralysis. It was realized that the vessel could not long remain afloat, but there was no confusion. Crew and passengers coolly

waited for and obeyed orders. Boats were lowered and life-rafts placed in the water. Fifteen minutes after the torpedoes struck, all hands except the guns'-crews were ordered to abandon the ship.

Gunners stood at their stations, awaiting any opportunity for a shot at the submarine. Commander Foote and several other officers remained aboard. All the rest of the ship's company were in the boats or on the rafts. When the guns began firing, they broke into cheers. The firing was kept up until the water covered the main deck, and the gunners did not leave their posts until they were ordered off just before the ship sank.

With her colors flying, twenty-five minutes after the torpedoes exploded, the *Lincoln* went down. Three officers and 23 men were lost. Seven working below decks were either killed by the explosion, or drowned by the inrush of water. Sixteen men on a raft alongside were caught by the current and carried under as the ship went down. The officers lost were Passed Assistant Surgeon L. C. Whiteside, the ship's medical officer; Paymaster Andrew Mowat, the supply officer, and Assistant Paymaster J. D. Johnson. Dr. Whiteside and Paymaster Mowat had seen that the men under their charge had gotten away safely, the doctor having attended to placing the sick in the boat provided for them. Paymaster Johnson was on the raft which was pulled down as the ship plunged.

Admiral Sims cabled that the "small loss of life is due to thorough discipline of ship's company, and excellent seamanship of Commander Foote." This he said was "evidenced by actual results even after the ship had sunk and the personnel was adrift in boats and on rafts." Admiral Gleaves wrote to Foote: "Your action and judgment under such trying conditions were in accord with the best traditions of the service." Half an hour after the ship went down a large submarine emerged, and went among the boats and rafts, seeking the commander and other senior officers, whom they wished to take prisoners. The Germans could identify only one officer, Lieutenant Edouard Victor M. Isaacs, who was taken on board and carried away. The submarine—it was the U-90,—remained in the vicinity for two hours, and returned again in the afternoon, evidently seeking to attack other vessels of the convoy. But they were

far away, having, in accordance with standard instructions to avoid attack, put on all steam and left the scene as soon as the *Lincoln* was hit.

The U-boat was so menacing that some feared it would fire upon the life-craft. When several of the crew went to its gun, apparently preparing it for action, a man in one of the boats exclaimed: "Good night! Here come the fireworks!"

By dark the boats and rafts had been lashed together. Lighted lanterns were hoisted and flares and signal lights burned every few minutes. None knew when aid would arrive. Distress signals had been sent out, but the nearest destroyers were 250 miles away, protecting another convoy. Military necessity might prevent their being detached.

Five hundred miles from land, waiting for aid until far in the night, the men cheered and sang such songs as "Over There," "Keep the Home Fires Burning," "Hail, Hail, the Gang's All Here," and "Where do we go from here, boys?" At 11 p. m. the destroyers *Smith* (Lieutenant Commander Kenyon) and *Warrington* (Lieutenant Commander Klein) arrived. With only the wireless distress message sent at 9 a. m. to guide them, they had located the life-craft in the middle of the night, though boats and rafts had drifted 15 miles. The hundreds of survivors were taken aboard the destroyers, which remained until daylight to search for survivors, departing at 6 a. m.

Though their decks were crowded with the *Lincoln's* officers and men, the *Smith* and *Warrington* made a fast run to Brest, arriving there next day. En route they sighted the wake of a periscope and rained depth-bombs on the very submarine which had sunk the *Lincoln,* but by descending to a great depth the U-90 escaped.

That it was the same U-boat was learned positively when, months afterward, Lieutenant Isaacs escaped from prison. His experiences aboard the submarine and in Germany make a thrilling story. Describing his capture, after the sinking of the *Lincoln,* and his being taken aboard the U-boat, Lieutenant Isaacs said:

> We passed north of the Shetlands into the North Sea, the Skagerrak, the Cattegat, and the Sound into the Baltic. Proceeding to Kiel, we passed down the canal through Heligoland Bight to Wilhelmshaven.

From the painting by Frank Dana Marsh

THE SINKING OF THE PRESIDENT LINCOLN

The U. S. S. President Lincoln, commanded by Captain P. W. Foote, was one of the two vessels of the Cruiser and Transport Force which were sunk by submarines. She was lost on May 31, 1917, going down with colors flying twenty-five minutes after the torpedoes struck her. Of the 715 persons on board, all but 26 were saved.

THE SECRETARY OF THE NAVY WITH CAPTAIN DISMUKES AND THE MEN WHO SAVED THE MOUNT VERNON

THE MOUNT VERNON, FORMERLY THE GERMAN LINER KRONPRINZESSIN CECILIE, SAFELY IN PORT AFTER BEING TORPEDOED, SEPTEMBER 5, 1918.

On the way to the Shetlands we fell in with two American destroyers, the *Smith* and the *Warrington*, who dropped 22 depth bombs on us. We were submerged to a depth of 60 meters and weathered the storm, although five bombs were very close and shook us up considerably. The information I had been able to collect was, I considered, of enough importance to warrant my trying to escape. Accordingly in Danish waters I attempted to jump from the deck of the submarine, but was caught and ordered below.

The German Navy authorities took me from Wilhelmshaven to Karlsruhe, where I was turned over to the army. Here I met officers of all the Allied armies, and with them I attempted several escapes, all of which were unsuccessful. After three weeks at Karlsruhe I was sent to the American and Russian officers' camp at Villingen. On the way I attempted to escape from the train by jumping out of the window. With the train making about 40 miles an hour, I landed on the opposite railroad track and was so severely wounded by the fall that I could not get away from my guard. They followed me, firing continuously. When they recaptured me they struck me on the head and body with their guns until one broke his rifle. It snapped in two at the small of the stock as he struck me with the butt on the back of the head.

I was given two weeks solitary confinement, for this attempt to escape, but continued trying, for I was determined to get my information back to the Navy. Finally, on the night of October 6, assisted by several American Army officers, I was able to effect an escape by short-circuiting all lighting circuits in the prison camp and cutting through barbed-wire fences surrounding the camp. This had to be done in the face of a heavy rifle fire from the guards. But it was difficult for them to see in the darkness, so I escaped unscathed.

In company with an American officer in the French Army, I made my way for seven days and nights over mountains to the Rhine, which to the south of Baden forms the boundary between Germany and Switzerland. After a four-hour crawl on hands and knees I was able to elude the sentries along the Rhine. Plunging in, I made for the Swiss shore. After being carried several miles down the stream, being frequently submerged by the rapid current, I finally reached the opposite shore and gave myself up to the Swiss gendarmes, who turned me over to the American legation at Berne. From there I made my way to Paris and then London and finally Washington, where I arrived four weeks after my escape from Germany.

It was my pleasure to greet Lieutenant Isaacs on his return, congratulate him on his escape, and commend him for the heroic courage and enterprise he had displayed under such trying circumstances.

The *Covington* (Captain R. D. Hasbrouck) was torpedoed July 1st at 9:15 p. m., the torpedo smashing a hole in the vessel's

side and throwing into the air a column of water higher than the smokestacks. Engine and fire rooms quickly filled, the ship lost headway rapidly and in fifteen minutes lay dead in the water.

Listing heavily to port, it was feared the vessel might take a lurch and sink suddenly. Twenty-one boats were lowered, three had been smashed by the explosion. "Abandon ship," was ordered. The bugle sounded "Silence," and silently the men went down the Jacob's ladders as if they were at drill. The destroyer *Smith* stood close by, taking the men from the boats. Thirty officers and men remained aboard with the Captain until an hour after the torpedo struck.

Hoping to save the transport, a salvage party was organized, to go on board as soon as the men could be collected from rafts and boats. The little *Smith,* which in addition to its own crew of one hundred, had aboard 800 of the *Covington's* officers and men, encircled the transport to keep off the submarine and prevent it from firing another torpedo.

Another destroyer, the *Reade,* came to the rescue; at 4:20 a. m. the British salvage tugs, *Revenger* and *Woonda* arrived, and at 5:30 o'clock the American tug *Concord* reached the scene. The *Smith,* which was ordered to take to port all the crew not needed, at 5:20 left for Brest. By 6 o'clock the three tugs had the *Covington* in tow, and were making from five to six knots through the water. Two more destroyers joined shortly after to guard the crippled ship from attack. She was then listed about twenty degrees to port, and about noon took a quick list of ten degrees more.

By 1:30 p. m. she had heeled to an angle of 45 degrees. Sensing sinking conditions, the working party was directed to leave the ship, the *Nicholson* taking them off. At 2:30 the *Covington* began to sink rapidly by the stern and disappeared two minutes later. The ship went down with her colors flying.

The only fighting ship of the Cruiser and Transport Force that was sunk—in fact, the only large United States naval vessel lost during the war—was the armored cruiser *San Diego* (Captain H. H. Christy) sunk by a mine off Fire Island, N. Y., July 19, 1918.

Proceeding from Portsmouth, N. H., to New York, the cruiser was steering what was regarded as a safe course to avoid the

submarines, then operating in Atlantic waters, and the mines they had laid. Lookouts, gun-watches, fire control parties were at their stations, the whole crew on the alert. There was no sign of any U-boat or mine.

Suddenly, at 11:05 a. m., there was an explosion at frame No. 78, on the port side well below the water line. "Full speed ahead," was rung by the Captain, who hoped the ship could be kept afloat, and the starboard engine operated until it was stopped by rising water.

Machinist's Mate Hawthorne, who was at the throttle in the port engine room, was blown four feet under a desk. He got up, closed the throttle on the engine, which had already stopped, and then escaped up the ladder. The lieutenant on watch in the starboard engine room, closed the water tight doors, and gave instructions to the fireroom to protect the boilers.

The vessel listed to port so heavily that water entered the gun ports on the gun deck. Listing 8 degrees quickly, the vessel hung for seven minutes; then gradually turned until 35 degrees was reached. At this time the port quarter-deck was three feet under water. The cruiser then rapidly turned turtle and sank.

Captain Christy was last to leave the ship. Going from the bridge down two ladders to the boat deck, he slid down a line to the armor belt, then dropped four feet to the bilge keel, and thence to the docking keel. From there he jumped into the water. The men cheered their captain as he left the ship. On the rafts they sang "The Star Spangled Banner" and "My Country 'Tis of Thee," and more cheers arose when the United States ensign was hoisted on the sailboat.

Two dinghies with six officers and twenty-one men pulled to shore, arriving at 1:20 p. m. The steamer *Malden* picked up 370 officers and men, the *Bossom* 708; the *E. P. Jones* 78. Six men were lost, three of these being killed by the explosion. The court of inquiry reported that "the conduct of the Captain, officers and crew was in the highest degree commendable," and that "the remarkably small loss of life was due to the high state of discipline maintained on board."

This was the last loss sustained by the Cruiser and Transport Force until September 5th. Then the troopship *Mt. Vernon* (Captain D. E. Dismukes) was torpedoed, but by splendid sea-

manship was taken to port under her own steam. The *Mt. Vernon,* homeward bound, was 250 miles from the coast of France when she was struck. The explosion was so terrific that for an instant it seemed that the ship was lifted clear out of the water and torn to pieces. Men at the after guns and depth-charge stations were thrown to the deck, and one gun thrown partly out of its mount. The torpedo struck fairly amidship, destroying four of the eight boiler-rooms and flooding the middle portion of the vessel from side to side for a length of 150 feet. The vessel instantly settled 10 feet increase in draft, but stopped there. This indicated that the water-tight bulkheads were holding, and she could still afford to go down two or three feet more before she would lose her floating buoyancy. The immediate problem was to escape a second torpedo. Depth-charge crews jumped to their stations, and started dropping a depth-bomb barrage.

Men in the firerooms knew that the safety of the ship depended on them. The shock of the explosion, followed by instant darkness, falling soot and particles; the knowledge that they were far below the water level inclosed practically in a trap; the imminent danger of the ship sinking, the added threat of exploding boilers—all these dangers and more must have been apparent to every man below, said Captain Dismukes, and yet not one man wavered in standing by his post of duty.

C. L. O'Connor, water tender, was thrown to the floor and enveloped in gas flames from the furnaces. Instead of rushing to escape, he turned and endeavored to shut a water-tight door leading into a large bunker abaft the fireroom, but the hydraulic lever that operated the door had been damaged and failed to function. Three men at work in this bunker were drowned. If O'Connor had succeeded in shutting the door, all would have been saved. Caught in the swirl of inrushing water, O'Connor was thrust up a ventilator leading to the upper deck.

The torpedo exploded on a bulkhead separating two fire-rooms, the explosive effect being apparently about equal in both firerooms, yet in one fireroom not a man was saved, while in the other two of the men escaped. The explosion blasted through the outer and inner skin of the ship and through an intervening coal bunker and bulkhead, hurling overboard 750 tons of coal.

The two men saved were working the fires within 30 feet of the explosion and just below the level where the torpedo struck. How they escaped is a miracle. One of the men, P. Fitzgerald, landed on the lower grating. Groping his way through the darkness, trying to find the ladder leading above, he stumbled over the body of a man apparently dead. Finding he was only unconscious, Fitzgerald aroused him and took him to safety. The man would have been lost, for the water rose 10 feet above this grating as the ship settled.

Shortly after the Mt. Vernon arrived at Brest, Captain Dismukes received this letter from Brigadier General George H. Harries, U. S. A.:

> Sorrow mingled with pride, for those who died so nobly. Congratulations on the seamanship, discipline and courage. It was a great feat you accomplished.
>
> Passengers whom I have seen this morning are unable to fully or fitly voice their praises of your always worthy self or of your ship's company.
>
> The best traditions of our Navy have been lifted to a higher plane. What a fine thing it is to be an American these days!
>
> The olive drab salutes the blue.

Every American vessel available was pressed into service to bring the troops home after the war.

Fifty-six cargo vessels were converted into troop-carriers. Nine of the German vessels turned over under the armistice were assigned to us—the *Imperator, Kaiserin Augusta Victoria, Prinz Friedrich Wilhelm, Zeppelin, Cap Finisterre, Graf Waldersee, Patricia, Pretoria,* and *Mobile.* The capacity of all our transports was considerably increased.

But more was needed, and I gave orders to use our old battleships and cruisers to carry troops. Naval officers objected, saying these warships were not fitted for such duty. I was told the soldiers on board would be uncomfortable, and would return home with a grouch against the Government and the Navy. What happened? Army officers and men were glad of the chance to come home on a warship. It was an experience no other soldiers had enjoyed. Once aboard, they fell to and made themselves thoroughly at home. Upon the arrival at Hampton Roads of the first battleship bringing troops, the Army officers

sent me a letter of thanks for the fine voyage and the opportunity to return on a naval vessel, and later other officers expressed themselves in similar fashion.

In a few months we had in operation 142 vessels carrying troops with facilities for 363,684 officers and men. The maximum was reached in June, when 340,946 embarked from France, 314,167 of them in United States transports. This exceeded the largest number carried overseas by all American and Allied vessels in any one month during the war. By the end of July, 1919, 1,770,484 men had been returned to America. The big troop movement was virtually over by October 1st, at which time nearly two million had been returned, 1,675,733 of them in naval transports. Several thousands more came later, and 11,211 had returned previous to the armistice.

The record of the ten leading vessels of the Cruiser and Transport Force, in troops carried to Europe and passengers and sick and wounded returned, was:

	Transported to Europe	Transported From Europe		Total Carried
		Passengers	Sick and Wounded	
Leviathan	96,804	93,746	10,913	192,753
America	37,768	46,823	4,668	86,801
George Washington	48,373	34,142	5,085	83,350
Agamemnon	36,097	41,179	4,425	78,249
President Grant	39,974	37,025	3,301	77,129
Mount Vernon	33,692	12,500	4,015	76,402
Siboney	20,299	34,702	5,307	55,169
Mongolia	19,013	34,813	2,707	54,337
Manchuria	14,491	39,501	6,186	54,230
Great Northern	28,248	22,852	5,522	54,085
	374,679	427,283	52,129	812,505

These ships also brought back 2,366 passengers before the armistice, which are included in the total numbers carried.

The other vessels used in transporting to France, as well as returning troops were:

Aeolus	*Finland*	*K. der Nederlanden*
Antigone	*Hancock*	*Kroonland*
Calamares	*Harrisburg*	*Lenape*
Covington	*Henderson*	*Louisville*
DeKalb	*Huron*	*Madawaska*

H. R. Mallory
Martha Washington
Matsonia
Maui
Mercury
Northern Pacific
Orizaba
Pastores
Plattsburg
Pocahontas
Powhatan
President Lincoln
Princess Matoika
Rijndam
Sierra
Susquehanna
Tenadores
Von Steuben
Wilhelmina
Zeelandia

The battleships and cruisers employed in troop transportation brought back more than 145,000 men, as follows:

Battleships—*Connecticut,* 4,861; *Georgia,* 5,869; *Kansas,* 7,486; *Louisiana,* 4,714; *Michigan,* 1,052; *Minnesota,* 3,955; *Missouri,* 3,278; *Nebraska,* 4,530; *New Hampshire,* 4,900; *New Jersey,* 4,675; *Ohio,* 778; *Rhode Island,* 5,303; *South Carolina,* 4,501; *Vermont,* 4,795; *Virginia,* 5,784; total, 66,481.

Cruisers—*Charleston,* 7,704; *Frederick,* 9,659; *Huntington,* 11,913; *Montana,* 8,800; *North Carolina,* 8,962; *Pueblo,* 10,136; *Rochester,* 317; *Seattle,* 9,397; *South Dakota,* 3,463; *St. Louis,* 8,437; total, 78,788.

Merchant ships converted into troop-carriers, and used in bringing soldiers home were:

Alaskan
Amphion
Ancon
Arcadia
Arizonian
Artemis
Black Arrow
Buford
Callao
Canandaigua
Canonicus
Cape May
Comfort
Dakotan
Eddelyn
El Sol
El Oriente
Etten
Eurana
Floridian
Freedom
Gen. Goethals
Gen. Gorgas
Housatonic
Iowan
Kentuckian
Lancaster
Liberator
E. F. Luckenbach
Edward Luckenbach
F. J. Luckenbach
Julia Luckenbach
Katrina Luckenbach
K. I. Luckenbach
W. A. Luckenbach
Marica
Mercy
Mexican
Minnesotan
Montpelier
Nansemond
Ohioan
Otsego
Panaman
Paysandu
Peerless
Philippines
Radnor
Roanoke
Santa Ana
Santa Barbara
Santa Cecilia
Santa Clara
Santa Elena
Santa Elisa
Santa Leonora
Santa Malta
Santa Olivia
Santa Paula
Santa Rosa
Santa Teresa
Scranton
Shoshone
Sol Navis
South Bend
Suwanee
Texan
Tiger
Troy
Virginian
Yale

These converted cargo ships brought 441,986 passengers, 10,452 wounded; total 452,438. The nine German passenger ships employed after the armistice brought back 138,928.

When the troop movement was near its close, in September, 1918, Admiral Gleaves, who had been in charge from the beginning, was made commander-in-chief of the Asiatic fleet. He was succeeded by Captain C. B. Morgan. The Cruiser and Transport Force, which at its maximum comprised a fleet of 142 vessels, of 2,341,038 tons displacement, carried across the Atlantic, going to or returning from Europe, approximately 2,600,000 persons. And this without the loss, through navigation or enemy action, of any soldier entrusted to its care.

CHAPTER IX

THE FLEET THE KAISER BUILT FOR US

EX-GERMAN VESSELS CARRIED 557,000 AMERICAN TROOPS TO EUROPE—ENGINES AND MACHINERY WRECKED BY THEIR CREWS, GERMANS BELIEVED THEY COULD NEVER BE USED—NAVY REPAIRED LINERS, AND HAD ALL RUNNING IN TRANSPORT SERVICE IN A FEW MONTHS—TRIUMPH OF AMERICAN GENIUS AND ENGINEERING SKILL—REMARKABLE RECORD MADE BY "LEVIATHAN."

MORE than half a million of the troops that defeated the Germans were transported across the Atlantic in German vessels. I sometimes wonder if the Kaiser ever dreamed, when his liners came scurrying into American ports in 1914, that he was presenting us with the one thing we needed most, a lot of the finest transports that ever sailed the sea.

That could not happen according to the Teuton mind. They had figured it all out. If America kept out of the conflict, their ships would be as safe here as in their home ports. If we did enter the war, they would be so badly damaged that we could not use them. This was all carried out according to schedule. Before ruthless U-boat warfare was declared, Bernstorff had issued his orders, and all the interned vessels were disabled, their engines and machinery smashed.

"Some you may get running in a year; some you can never use," boasted the German crews.

"If America can repair this ship, I will eat my hat," said another. He has not yet tested his digestion by a diet of headgear.

But they, like the Kaiser and Admiral Von Holtzendorff, underestimated American ingenuity and enterprise. By using new methods, and keeping at the task day and night, in a few months all these vessels were repaired and in service, carrying troops and supplies.

The German *Vaterland,* re-christened the *Leviathan,* alone carried nearly a hundred thousand troops to Europe. When she was performing such prodigies for us it interested me to recall an occurrence when this great vessel, the largest afloat, reached New York on its first voyage, not long before the war began in 1914. Glorying in the attention it evoked, the *Vaterland's* officers gave a dinner, inviting leading American shipbuilders and engineers, as well as prominent citizens, to view this latest creation in marine construction.

"It is a veritable floating palace for voyagers to Europe," remarked one of its officers, "but that is not the best or most important thing about the *Vaterland.*"

"Well, what is it?" asked the visitors.

"Come below," said he, "and I will show you."

Below went the party, and there they were shown how the whole vessel had been planned so that it could quickly be converted into a carrier for 10,000 soldiers. "In a remarkably short time, if need arises," the officer remarked, "it can be turned into a troop transport."

He was right. We proved it in 1917, not only in regard to the *Vaterland,* but the other Teuton liners.

Repaired, renamed, manned and operated by United States naval officers and men, those former German vessels carried to Europe 557,788 American soldiers. Here is the record in detail:

German Name	American Name	U. S. Troops Carried
Vaterland	*Leviathan*	96,804
Kaiser Wilhelm II	*Agamemnon*	36,097
Koenig Wilhelm II	*Madawaska*	17,931
President Lincoln	*President Lincoln*	20,143
President Grant	*President Grant*	39,974
Barbarossa	*Mercury*	18,542
Grosser Kurfurst	*Aeolus*	24,770
Hamburg	*Powhatan*	14,613
Friedrich der Grosse	*Huron*	20,871
Prinzess Irene	*Pocahontas*	20,503
George Washington	*George Washington*	48,373
Martha Washington	*Martha Washington*	22,311
Prinz Eitel Friedrich	*DeKalb*	11,334
Amerika	*America*	39,768
Neckar	*Antigone*	16,526

German Name	American Name	U. S. Troops Carried
Cincinnati	*Covington*	21,628
Kronprinzessin Cecelie	*Mount Vernon*	33,692
Prinzess Alice	*Princess Matoika*	21,216
Rhein	*Susquehanna*	18,345
Kronprinz Wilhelm	*Von Steuben*	14,347
Total		557,788

The repair of those vessels was a triumph of ingenuity and engineering skill. But they were not the only interned ships the Navy restored. When war was declared there were seized German merchant vessels aggregating 592,195 gross tons, Austrian ships, 40,461 tons—a total of 632,656 tons of shipping placed under the United States flag from these two sources.

The machinery was so badly damaged that those in charge had practically decided that new cylinders and various other parts would have to be manufactured and installed. This would have caused many months' delay. Captain E. P. Jessop, engineering officer of the New York Navy Yard, who had been acting as advisory officer in connection with these ships before they were turned over to the Navy, was confident that the most serious breaks could be repaired by electric welding. Rear Admiral Burd, industrial manager of the New York Yard, was of the same opinion, as were engineering experts in the Navy Department. But there was doubt among other engineers, and strong opposition to the new method. The vessels were then under control of the Shipping Board, but it was expected that those to be used as troop-ships would be assigned to the Navy. Anticipating such action, Admiral Griffin, Chief of the Bureau of Engineering, in June sent his assistant, Captain O. W. Koester, to New York to make a thorough investigation. He returned convinced that repairs could be successfully made by electric welding, and this process was immediately adopted.

Sixteen of these vessels were turned over to the Navy on July 11, 1917. Work was begun the next morning. Cylinders had been broken, throttle and engine valves destroyed, pipes cut, fittings smashed. Parts easily removable had been thrown away. The German crews had done all they could to put the ships out of business. Memorandums found aboard bore the

frequent comment, "Cannot be repaired." There were serious injuries that had been carefully concealed, evidently with the idea of disabling the vessels if they ever got to sea. Important parts were cut in half, then replaced so the cut would not be discovered. Obstructions were placed in cylinders to wreck the engines as soon as steam was turned on. Every inch of the machinery had to be examined inside and out. The fact that nothing escaped detection is evidence of the thoroughness with which the work was done.

The *Barbarossa,* which we renamed the *Mercury,* was the first ship repaired by the new welding process. Given a sea trial of 48 hours, she was put to every imaginable test. The results proved satisfactory in every particular. On all the other vessels, virtually the same methods were used—electric or oxy-acetylene welding, mechanical patching, and at times a combination of these. Each ship was, upon completion, tested by long runs at sea, so that no doubt might exist as to the safety of the troops they were to carry. It is noteworthy that no weakness ever developed in the engines so repaired.

Of the 103 German and Austrian vessels seized, the Navy converted 34 into troop and freight transports. Subsequently it repaired 20 more for the Shipping Board.

To build new cylinders, replace burned-out boilers and other machinery, would have required at least a year, perhaps more, it was estimated. By using new methods, the Navy quickly restored the ships assigned to it. In a few months all were in service—and some of them were running at higher speed than the Germans had ever been able to attain.

Twelve months in time was saved, during which these vessels transported hundreds of thousands of troops. The entire saving was estimated at more than $20,000,000.

Until the United States declared war, these vessels were, under strict interpretation of international law, not liable to seizure. They could not leave our ports, but the crews remained aboard and, though under constant surveillance to prevent unneutral acts, they caused the American authorities considerable trouble. There were nine German liners at their piers in Hoboken when Germany declared war. All had been ordered not to sail. Being a part of the German Naval Reserve, they

were subject to the orders of the German Admiralty. The *Vaterland* was scheduled to sail that day, having booked some 3,600 passengers. Angry crowds who had purchased tickets stormed the piers, and extra guards had to be placed around the vessel. German crews held a mass-meeting in Hoboken, discussing mainly how they could get back to Germany. Ten thousand reservists on August 6th demanded of the German Consul that he send them back on the *Vaterland* to rejoin their regiments. But not one of those vessels ever escaped from American ports.

Their crews, however, were always seeking to help Germany and injure the Allies. Most of their plots and plans were foiled, though they did succeed, now and then, in "putting something over." The *Grosser Kurfurst* (*Aeolus*) was, we found later, used as a sort of "clearing ship" for German officers in this country. They had secret orders to go aboard her and stay until arrangements could be made for them to travel aboard outbound steamers. Disguised, often carrying forged or illegally-obtained passports, some of them managed to get to Germany. The captain of the *Aeolus,* its chief engineer and purser were among those who successfully ran the British blockade. Given command of a Zeppelin, the captain took part in several airship raids, but was brought down and killed near London. When news of his death came, the flags on all the German interned ships were placed at half-mast.

When the ship-bomb conspiracy was unearthed—the scheme to place explosives in cargoes, timed to go off and sink vessels when they were far out at sea—it was found that men on board the *Friedrich der Grosse* (*Huron*) had been making parts of these bombs, which were assembled at a plant in Hoboken. This plot, however, was nipped in the bud. The sailors and others involved were promptly arrested, tried, convicted, and sent to jail.

When the *Lusitania* was sunk in 1915 the German sailors held a celebration. Thinking war with the United States was imminent, they prepared to destroy the ships, only waiting for the word to carry out the orders previously given them. This was, again, the case in 1916, when we came so near war after the sinking of the *Sussex.* But the orders did not finally come

until January 31, 1917, when, obeying Ambassador Bernstorff's instructions, they smashed the machinery of the vessels.

They regarded it as a huge joke when, on the morning of April 1st, a naval vessel anchored off Pier 2, and set watch over them. But they laughed on the other side of their mouths when, four days later, United States officials rounded up officers and men, and sent them to Fort Oglethorpe, Ga., and other Federal prisons and internment camps.

The *Vaterland* was taken over at 4 a. m., April 5th. On that day the United States armed forces seized 91 German ships in various ports. The night before, U. S. Government officials held a conference on the *Vaterland* with the German commanders, who were warned against any violence. There was no resistance when the ships were seized.

The *Vaterland,* with a displacement of 69,000 tons, was the biggest craft afloat. There was no drydock in America large enough to hold her. When the engineering officers reported to Captain J. W. Oman, her commander, that the former *Vaterland* (she had been renamed the *Leviathan*) was "in all respects ready for sea," it was decided to test her out by a longer run than that to which any other vessel had been subjected, making a trial trip to Cuba.

On her return, the ship was carefully gone over again, every part put in prime condition, and on December 15, 1917, in a snowstorm, she sailed on her first trip across the Atlantic. The ship's complement was 68 officers and 2,240 men. She had aboard 7,254 troops, including base hospitals 31 and 34, the 163rd and 164th Infantry, and headquarters of the 82nd Brigade, Brigadier General Edward Vellruth commanding.

Running for the first day or two at 20 knots, the ship then speeded up to 21½ knots. The *Leviathan* had "struck her gait." She made the run across in record time. In describing this voyage, the "History of the *Leviathan*" says:

> On the morning of December 23rd, at 4 a. m., out of the black sky, just before dawn and in a heavy sea with a strong wind blowing, a small white wake was seen by the lookout on the bridge. At first it was taken for the wake of a periscope and the gun crews were called to quarters, then as the guns were trained on it, a small white flash was seen blinking the American recognition signal, and we then knew that

it was one of our destroyers. We picked them up out of the black sky and a heavy sea until there were seven little wasps that spelled danger to the Hun submarine. They sped along with us while we zigzagged in and out on our course. They crossed our bow and ran in and far out on each side of us, always looking for the "sub" that might be lying in wait for us. Their motto was, "Go get 'em." They never waited for a "sub" to attack first, they always started the fight provided that "Fritz" was willing to show himself; and we want to say right here that he was very reluctant to do so when an American destroyer showed itself.

That night the *Leviathan* dropped anchor outside Liverpool, proceeding next morning, Dec. 24th, to the landing-stage, where the soldiers disembarked. The ship had to be sent into drydock to have her bottom thoroughly scraped and cleaned. Three years in disuse, she was covered with barnacles, and even oysters were found attached to her keel. The Gladstone Dock at Liverpool was the only drydock outside of Germany which would accommodate her. Even then, she had to wait more than two weeks for a tide high enough to float her in. Docking was completed successfully, but there was considerable delay before the big boat could get away, and it was not until Lincoln's birthday that she started back for America, reaching New York Feb. 19th. On her second trip, sailing March 4, 1918, the *Leviathan* carried 8,242 troops, under command of Major General J. T. Dickman. Liverpool was again the destination and she arrived there March 12th. Going up St. George's channel, there was considerable excitement when the destroyer *Manley,* head of the escort, sighting signs that led her to believe a submarine was near, swerved out of position, and began firing. One depth-bomb it dropped shook the *Leviathan* from stern to stern, and many persons aboard thought she had struck a mine. But she got in safely, and soon landed all her troops.

Low water again held the *Leviathan* in port for weeks, and it was not until April 10th, that she was able to sail. This was the last time she was sent to Liverpool. Thereafter, she went direct to Brest, and there were no more delays. In fact, on the third trip, when she carried 8,909 soldiers, under command of Brigadier General Walter H. Gordon, she disembarked her troops, took aboard 4,600 tons of coal, and the third evening after her arrival was on the way back to New York.

The *Leviathan* was so big a target and the German eagerness to sink her was so well known that there was at first opposition to the use of this big vessel as a troop-ship, and Admiral Sims wrote to me on November 2, 1917:

I have previously reported against using the *Vaterland* for the present until we have a little more experience in handling the other large transports. The *Vaterland* is, of course, a much larger target, and injury to her would be a serious affair. I am assuming too that all of the troops that we have to transport for the next few months can be accommodated in other transports, assisted by British liners. Whenever the situation becomes pressing, I presume we shall have to use the *Vaterland* and take the additional risk.

We did use the former *Vaterland* with such success that during all the war she was never touched by the enemy; but the fears entertained of attack on this biggest transport afloat were justified. On the fourth voyage, when in sight of the coast, May 30, 1918, the *Leviathan* recorded her first encounter with a submarine, following being the entry in the ship's log:

12:29 p. m.—Sighted submarine pursuing us on our port quarter about 1,500 yards distant. Ordered full speed, 165 revolutions. Opened fire with Number Six and Number Eight guns, three shots. Stopped zigzagging. Changed course 12:40 p. m.

12:59 p. m.—Submarine appeared again. Opened fire with Number Six and Number Eight guns. Nine shots.

1:19 p. m.—Submarine appeared again. Opened fire with Number Six and Number Eight guns. Seven shots.

1:34 p. m.—Threw in maneuvering combination. Standard speed 112 revolutions.

1:45 p. m.—Entering harbor at various courses and speeds.

Of this attack, the *Leviathan* History says:

The coolness of our commanding officer, Captain H. F. Bryan, and the splendid coördination of the entire crew were so perfect, that only three distinct orders were issued in this moment of peril as follows: 1. Hold your course. 2. Open fire on submarine, port quarter. 3. Sound General Alarm.

Every shot fired was greeted by cheers and shouts of encouragement from the enthusiastic soldiers on the decks, who crowded to favorable positions to witness the accurate firing of our gun-crews. The Army nurses left their luncheon to take a peek at the "fun," and their calmness and enthusiasm in the face of a deadly menace were an inspiration to the sailors manning the big guns.

Sailing the afternoon of June 1st, accompanied by the destroyers *Nicholson* and *Wadsworth,* at 7:16 o'clock a periscope wake was sighted on the starboard quarter. "Full speed ahead!" was rung, and the *Leviathan* sprang forward, a cloud of black smoke pouring from her funnels. Her guns began firing, and from the signal bridge floated the green-and-white submarine warning flag. The destroyers turned quickly and charged down the wake, laying a barrage of depth-bombs which shook the *Leviathan,* by that time nearly two miles away. The *Nicholson's* blinker lights flashed:

> We saw periscope of submarine and laid barrage of depth-charges around the spot. Will report to Force Commander.

The *Wadsworth* then inspected the locality, but soon signaled, "We see no submarine now." A few minutes later both destroyers steamed up to the big vessel and resumed escort.

Twilight had come, and it was an impressive scene when the chaplain (always called the sky pilot), as was his daily custom, went to the navigation bridge and offered the sunset prayer at sea—a prayer for the safety of captain, officers and crew; for soldiers, passengers and all on board.

Making the most of her speed, the *Leviathan* traveled alone, except for man-of-war escort, until August. Then she was accompanied by the *Great Northern* and *Northern Pacific,* and these fast ships made several voyages together. After arrival from her eighth trip, Sept. 19th, Captain William W. Phelps became the *Leviathan's* commanding officer, succeeding Captain Bryan. In April, 1919, he was succeeded by Captain E. H. Durell.

There were rumors of peace when the *Leviathan* sailed on her tenth trip October 27th, and as the destroyers met her they signaled that all the German submarines in that area had been recalled October 21st. Arriving at Liverpool November 3rd, she landed her last load of troops going to the front. A week later, when she was in drydock undergoing repairs, the armistice was signed; the fighting was over. The *Leviathan* had transported to Europe 96,804 officers and men of the American Army. She had carried across 119,215 persons, including her crew and naval supernumeraries. She had carried on a single voyage as many as 10,860.

In returning the troops all war-time records were broken. On the sixteenth west-bound trip, there were on board, including the naval crew, 14,300 persons. The vessel brought home 93,746 soldiers. She carried to or from Europe, including naval personnel and passengers, over 200,000 persons.

Completed in 1914, the *Leviathan* made but one round trip under the German flag. She had just arrived in New York on her second voyage when war broke out in Europe. That was all the use the Germans ever got of this wonder of the seas, which cost millions to build and was the pride of Germany.

CHAPTER X

GUARDING THE COAST OF FRANCE

BREST THE CENTER OF GREAT SYSTEM UNDER COMMAND OF WILSON—PATROL SQUADRON SENT OVER IN JUNE, 1917—ARMED YACHTS AND DESTROYERS ENABLED TROOPS TO REACH PORTS SAFELY—"STEWART" PLOWED THROUGH BLAZING AMMUNITION TO RESCUE SURVIVORS OF "FLORENCE H."—WRESTLE WITH DEPTH-BOMB.

ON the anniversary of the fall of the Bastille, the French national holiday, July 14, 1917, our naval forces began work with the French, whose vessels under DeGrasse had, 136 years before, given such signal aid to America in its struggle for liberty.

France was the center of American activities, military and naval, and our most important operations in Europe were in French waters. It was the vast system built up by the Navy, the splendid work of our armed yachts and destroyers and aircraft, which kept the sea lanes clear, protected transports, and enabled American troops and supplies to reach French ports in safety.

Sending naval vessels to France, and establishing bases were two of the first things considered by the Navy Department. They were discussed with the French mission, with Marshal Joffre and Admiral Chocheprat, when they reached Washington in April. They recommended Brest and Bordeaux as the principal ports to be used by the Americans, and we decided to establish bases there as well as at St. Nazaire, where our first troops landed.

Preparations were at once begun to send patrol craft, and for this purpose, the largest and best of American yachts, stripped of their luxurious fittings, were armed and converted into men-of-war. A special force was organized under command of Rear Admiral William B. Fletcher, and on June 9,

the first of the "U. S. Patrol Squadrons Operating in European Waters," sailed from New York for France. In this group were the *Noma,* (Lieutenant Commander L. R. Leahy); *Vedette,* (Lieutenant Commander C. L. Hand); *Christabel,* (Lieutenant Commander H. B. Riebe); *Kanawha,* (Lieutenant Commander H. D. Cooke); *Harvard,* (Lieutenant Commander A. G. Stirling), and the *Sultana,* (Lieutenant Commander E. G. Allen). Proceeding by way of the Azores, they reached Brest July 3. Two speedier yachts, the *Corsair* (Lieutenant Commander T. A. Kittinger), and the *Aphrodite* (Lieutenant Commander R. P. Craft), sailed from New York with the first troop convoy June 14, reaching St. Nazaire June 27, and arriving at Brest July 2.

Protection of vessels carrying troops was the primary mission of our forces in France, and after that the storeships loaded with munitions, materials and supplies for the Army. But this was by no means all their work. They escorted convoys sailing from Verdon, vessels coming from Bordeaux, Pauillac and other points up the Gironde river; from Brest; from Quiberon Bay (St. Nazaire); ships of all kinds sailing along the coast of France, for England or southern ports.

With headquarters at Brest, where the American admiral had his offices next to those of the French Chief of the Brittany Patrol, Vice Admiral Schwerer, who acted directly under Vice Admiral Moreau, senior Allied naval officer, an organization was built up extending all along the French coast. Working in closest coöperation with the French, our forces were always under American command, first under Admiral Fletcher, and then under Admiral Henry B. Wilson, who succeeded him on Nov. 1, 1917.

Captain T. P. Magruder was made senior naval officer at Lorient, with a division of mine-sweepers to keep clear the approaches to St. Nazaire. Captain N. A. McCully commanded the Rochefort district, which extended from the Lorient line to the Spanish coast. Six yachts were based at Rochefort, to give prompt service to convoys entering the Gironde River, for Bordeaux or Pauillac. The Brest district, from Cape Brehat to Penmarch Point, was in command of Captain H. H. Hough, and the Cherbourg district, north of this, was assigned to Commander David Boyd. Naval port officers, stationed at Brest,

Havre, Cherbourg, Rouen, St. Malo, Granville, St. Nazaire, Nantes, Quiberon Bay, Sables d' Olonne, Bordeaux, La Pallice, Rochefort, Royan, Verdon, Pauillac and St. Jean de Luz, kept in touch with Army officials and shipmasters, expediting dispatch of vessels and the flow of transportation and commerce. Military and naval officers pulled together with a will, and the saying was: "There is no Army and Navy at Brest. It's all one gang!"

From Brest radiated lines of command, communication, and coöperation—to our own forces, and the French naval commanders on the coast; our naval representatives and naval attaché in Paris, and the French Ministry of Marine; through the superintendent of ports and coding officer to Army officials, those in charge of troops and supply transport; to the Chief of Aviation and the American and French air forces; and to U. S. Naval Headquarters in London.

The development of this organization brought such success in anti-submarine operations as the French coast had never known, changing the entire situation in these waters, not only for our vessels but for all Allied shipping. Here is a chart record of vessels sunk by submarines on the west coast of France for six months and it tells the story:

October, 1917	24
November, 1917	13
December, 1917	4
January, 1918	9
February, 1918	1
March, 1918	0

Describing an evening with Admiral Wilson, Reginald Wright Kauffman wrote:

The Admiral and his staff sleep in rooms just below their office. That is, they say they sleep. I asked the Admiral's orderly if he had ever seen him in bed, and he said, "No, sir."

The Admiral, after a long day's work, spoke of how good it was to draw his chair close to the open fire. One of the three guests had to leave early, because, although he is our host's nephew, he had volunteered as a common seaman and had to be aboard ship betimes. That orderly of the commander, a Lehigh graduate with six months' experience of the service, muttered in the hall:

"This is the most democratic Navy I ever saw; an Admiral helping a gob on with his coat!"

That intimate view of Admiral Wilson shows the side of his character which makes officers and men love him. Strict in discipline, firm in administration, a master of his profession, he illustrates the military truth that he is the greatest officer who is the best shipmate. It was this combination of qualities which enabled him to do the big job in France, where he was beloved and honored by the French as well as the Americans.

What Mr. Kauffman described at Brest was characteristic of our Navy in the war, as it was of our crews on the French coast. In one gun's crew a young New York millionaire served with a former mechanic and an erstwhile clerk from the East Side. In the crew of a yacht was a Philadelphia policeman and a Texas ranger; the first boatswain's mate had his sheepskin from Cornell; there was a Lehigh senior in the forecastle and a Harvard post-graduate assisting in the radio room. Several young men served as sailors on ships their fathers owned, and had turned over to the Government for war use.

They were nearly all reservists or recent recruits, the crews of the armed yachts and sub-chasers. But they put it over like veterans, and took things as they came. And they had some lively brushes with the "subs."

The yachts got a taste of U-boat warfare on the way over. The *Corsair* was with the troop-ships when the group she was escorting was attacked by submarines. Nearing the French coast on July 2, the *Noma* sighted a periscope, and with the *Kanawha* circled the vicinity for some time, but without result. The next evening the *Sultana,* which was somewhat behind the other yachts, arrived at Brest, bringing 37 of the crew and 13 of the armed guard of the American steamship *Orleans,* which had been sunk, apparently by the same submarine which had been sighted by the *Noma.*

The day after they began patrol duty, the *Harvard* brought into port 59 survivors picked up from two British ships that had been torpedoed. A torpedo was fired at the *Noma* on July 19, and on August 8th she took part in a fight between a noted British decoy-ship—"Q-boats," they were called—and a submarine in the Bay of Biscay.

"SOS," came the distress call from the *Dunraven,* "Shelled by submarine." The *Noma* had just finished repairing one of

her boilers, but she put on all steam and headed for the scene. As she came up, the vessel, torpedoed, seemed to be sinking. The submarine, which was close to the steamer, was still shelling her. The *Noma* headed for the U-boat, attempting to ram her, but she submerged and the yacht dropped depth-bombs around the spot. Then she turned attention to the *Dunraven.* This decoy ship, commanded by Captain Gordon Campbell, most noted of "Q-boat" captains, had pursued its usual tactics when the "sub" was sighted, part of the crew, disguised as merchant sailors, taking to the life-boats, leaving hidden aboard the gunners ready to fire shells or torpedo when the submarine ventured nearer. But this time the U-boat got the best of it. One of its shells struck the steamer and blew up a depth-bomb. Two more shots landed, and set the ship afire. The flames swept down to where ammunition, shells and torpedoes were piled, and they exploded, hurling gun and gun-crew into the air.

Then came the torpedo, which as it hit the ship caused another big explosion. But the *Dunraven* fought on, and it was only after she had fired two torpedoes at the "sub," and many of her crew were wounded, that she sent out the distress call.

The "sub" driven off, the *Noma* circled the vicinity, keeping a sharp lookout for the enemy. Two British destroyers arrived shortly afterward, and with the *Noma* rescued the decoy-ship's crew. One of them, the *Christopher,* took the *Dunraven* in tow, the *Noma* acting as escort until the next day, when she was relieved by a French destroyer. But the *Dunraven* was too badly damaged to remain afloat, and sank before she reached port.

Our forces in French waters were reinforced in August and September by nineteen more vessels, these being:

Second Patrol Division, Commander F. N. Freeman—*Alcedo,* (Lieutenant Commander W. T. Conn); *Remlik,* (Lieutenant Commander I. C. Johnson); *Wanderer,* (Lieutenant Commander P. L. Wilson); *Guinevere,* (Lieutenant Commander Guy Davis); *Corona,* (Lieutenant Commander L. M. Stevens); *Carola,* (Lieutenant Commander H. R. Keller); and the *Emeline,* (Lieutenant Commander R. C. Williams).

Third Division, Captain T. P. Magruder—*Wakiva,* (Lieutenant Commander T. R. Kurtz), armed yacht; *Anderton,* (Boatswain H. Miller); *Cahill,* (Lieutenant A. E. Wills); *Rehoboth* and *McNeal,* (Lieutenant C. N. Hinkamp); the *Lewes, James, Douglas, Bauman, Courtney,* and *Hinton,* (Lieutenant A. McGlasson), mine-sweepers; *Bath,* supply ship.

Sixteen American-built submarine chasers, which we had turned over to the French Government, also arrived in September, and began patrol off the French coast, and soon afterward the yachts *Nokomis,* (Commander D. Boyd); *May,* (Commander F. T. Evans), and *Rambler,* (Lieutenant E. G. Rose) and the mine-sweeper *Hubbard* were added to our force at Brest.

All along the French coast and in the Bay of Biscay our vessels were kept busy, escorting convoys, troop and cargo ships and hunting U-boats. This was done so effectively that we had no loss until October, when a mine-sweeper, the *Rehoboth,* foundered, the Army transport *Antilles* and the yacht *Alcedo* were sunk, and the *Finland* torpedoed.

Two days out from Quiberon Bay, on October 17th, the *Antilles,* bound for America, was proceeding with the *Henderson* and *Willehad,* escorted by the *Corsair* and *Alcedo,* when she was struck by a torpedo. Shivering from stern to stern, she listed immediately to port and began to sink. One of the lookouts in the main-top was thrown clear over the five-foot canvas screen, and killed as he struck a hatch. Everyone in the engine-room was killed or disabled except one oiler, who crawled through the skylight just as the ship went down. Of the 21 men in the engine and fire-rooms, only three survived—the oiler, and two firemen who escaped through a ventilator.

Commander Daniel T. Ghent, senior naval officer on board, gave the order to abandon ship. Boats were lowered, distress signals sent out. Guns were manned in the hope of getting a shot at the submarine. There the gunners remained until ordered to leave, and two of them—John Walter Hunt and J. C. McKinney—went down with the ship.

The vessel sank in four and a half minutes. Commander Ghent said:

> The behavior of the naval personnel throughout was equal to the best traditions of the service. The two forward guns' crews, in charge of Lieutenant Tisdale, remained at their gun stations while the ship went down, and made no move to leave until ordered to save themselves. Radio Electrician C. L. Ausburne went down with the ship while at his station in the radio room. When the ship was struck Ausburne and McMahon were asleep in adjacent bunks opposite the radio room. Ausburne, realizing the seriousness of the situation, told McMahon to

get his life preserver on, saying, as he left to take his station at the radio key, "Good-bye, Mac." McMahon, later finding the radio room locked and seeing the ship was sinking, tried to get Ausburne out, but failed.

Radio Electrician H. F. Watson was also lost. He remained with Commander Ghent on the bridge until the guns' crews were ordered to leave, and was on his way to a lifeboat when last seen.

The *Alcedo* rescued 117 and the *Corsair* 50 of the 234 persons who were on the *Antilles*. Sixty-seven were lost—4 men of the Navy, 16 of the Army; 45 of the ship's merchant crew; a civilian ambulance driver who had been serving with the French army, and a colored stevedore.

Rafts, set free by the blast of the explosion, were spread broadcast. Men who had been unable to get into the boats swam for them, and for boxes, planks or anything floating they could reach. As the *Corsair* was picking up the survivors, a sailor was seen calmly roosting on a box. As the yacht steamed for him, he stood up and, waving his arms, wigwagged:

"Don't come too close, box contains live ammunition!"

They rescued him with care, and with due respect for the explosive as well as for the gunner who considered the ship's welfare before he thought of his own safety.

Eleven days later the *Finland* was torpedoed, the explosion blowing in her side for 35 feet, the V-shaped hole running down to the bilge-keel. Three of the naval gun-crew, James W. Henry, Newton R. Head and Porter Hilton; two men of the Army, a colored transport worker, and six of the ship's merchant crew were lost. But the vessel, under the skilful direction of the senior naval officer, Captain S. V. Graham, made port under her own steam, was repaired and put back into service.

Repairing this ship was a striking example of the versatility of the American Army in France. The repairs were undertaken by the French naval arsenal, but man-power was scarce and the work was going slowly. A regiment of U. S. Army engineers, stationed at a point not far distant, offered assistance. Among them were a number of locomotive boiler riveters, and structural workers. It was these American "engineers" who came to the bat and actually repaired the *Finland*.

Neither the *Antilles* nor the *Finland* was a naval transport, both being chartered by the Army, and manned by civilian crews, the only Navy personnel aboard being the senior naval officer, the armed guard and the radio operators. It was the experience with these undisciplined crews which hastened the arrangement by which the Navy manned and operated, as well as escorted, all American troop-ships.

Only one of our armed yachts in French waters was sunk, the *Alcedo,* torpedoed at 1:45 a. m., November 5, 1917. She sank in eight minutes. About 75 miles west of Belle Ile, she was escorting a convoy, when a submarine was sighted, and then a torpedo, which struck the ship under the port forward chain-plates. Boats were lowered, and as the vessel began going down, Commander W. T. Conn, Jr., the commanding officer, ordered the men who were still aboard to jump over the side, intending to follow them. Before he could jump, however, the vessel listed heavily to port, plunging by the head, and sank, carrying him down with the suction. Coming to the surface, he swam to a raft, and later got to a whaleboat, which, with several dories, went among the wreckage, picking up survivors.

Half an hour after the *Alcedo* sank, the submarine approached, but after remaining twenty or thirty minutes steered off and submerged. After searching the vicinity for three hours, Commander Conn's boat and the others with him, containing 3 officers and 40 men, headed for Penmarch Light. They rowed until 1:15 that afternoon, when they were picked up by a French torpedo-boat. Reaching Brest at 11 p. m., Commander Conn was informed that two other dories, containing 3 officers and 25 men, had landed at Penmarch Point. One of the *Alcedo's* officers, Lieutenant (junior grade) John T. Melvin of Selma, Ala., and 20 enlisted men were lost.

This was the last American naval or troop-vessel sunk in many months by the submarines, which were kept on the run by our forces. The *Wakiva, Noma,* and *Kanawha* fought off two U-boats and it is believed sank one, which appeared as they were escorting the storeships *Koln* and *Medina* on November 28, 1917. At 6:20 p. m., the lookout on the *Kanawha* reported a periscope on the port beam, heading towards the *Medina.* It disappeared, but at 6:50 the *Noma* saw a periscope

on her starboard beam. Twelve minutes afterward the *Wakiva* sighted a periscope heading towards the convoy. Swinging into position to fire a torpedo at the *Wakiva,* the submarine crossed the yacht's wake. The *Wakiva* fired three shots, apparently striking the periscope, which disappeared. She also let go two depth-charges.

As the *Wakiva* approached, what appeared to be the conning tower of the submarine emerged. The yacht fired at it, and the conning tower sank. The *Wakiva* dropped numerous depth-charges and after they exploded her commander saw what seemed to be three men clinging to a piece of wreckage. He hailed them, but received no response, and when the yacht went near the place they had disappeared. In the meantime the *Noma* had continued search, and sighted a periscope on her starboard bow, turned toward it, and let go several depth-charges. Officers were convinced that there were two submarines, and that one of them was sunk by the *Wakiva.*

The *Christabel,* smallest of the converted yachts, surprised her big sisters by smashing up a submarine so badly that it was just able to reach a Spanish port, where U-boat and crew were interned for the remainder of the war. Escorting the *Danse,* a British steamer which had fallen behind its convoy two miles from Ile de Yeu, on May 21, 1918, the *Christabel* at 8:52 p. m. sighted a periscope, and made for it, firing two depth-bombs. As the second charge exploded, there followed another violent explosion which threw up, between the *Christabel* and the water column raised by the bomb, a large amount of water and debris. Heavy black oil and a number of splintered pieces of wood rose to the surface.

That was the last the *Christabel* saw of the "sub," but three days later the report came that the UC-56 had arrived at Santander, Spain, too seriously damaged to attempt to return to Germany. Its officers and men were glad enough to escape with their lives.

Fine as was the record of the armed yachts, it was more than equaled by the destroyers, which bore the heaviest part in escorting the vast number of troop and cargo ships sent to France. This duty was performed at first by our force at Queenstown, but from October on, when the tender *Panther*

(Commander A. M. Procter) and five destroyers arrived, destroyers were sent to Brest as follows:

Reid, (Commander C. C. Slayton); *Flusser,* (Lieutenant Commander R. G. Walling); the *Preston,* (Lieutenant Commander C. W. Magruder); *Lamson,* (Lieutenant Commander W. R. Purnell); *Smith,* (Commander J. H. Klein); *Monaghan,* (Lieutenant Commander J. F. Cox); *Roe,* (Lieutenant Commander G. C. Barnes); *Warrington,* (Lieutenant Commander G. W. Kenyon); *Whipple,* (Lieutenant Commander H. J. Abbett); *Truxtun,* (Lieutenant Commander J. G. Ware); *Stewart,* (Lieutenant Commander H. S. Haislip); *Worden,* (Lieutenant Commander J. M. B. Smith); *Isabel,* (Lieutenant Commander H. E. Shoemaker); *Nicholson,* (Lieutenant Commander J. C. Fremont).

Recounting what they accomplished, Admiral Wilson said:

The record of the service of these vessels on the coast of France furnishes one of the finest tributes in the history of our Navy to the soundness of their construction and to the ability of the personnel under trying conditions.

Until about the first of June, 1918, when the original lot of destroyer captains was detached and ordered to the United States to fit out new vessels, no American destroyers sent from France had ever missed contact with a convoy; no destroyer dispatched with a mission had ever returned to port before the completion of her duty, and furthermore, during this period, after the torpedoing of the *Finland,* on October 28, 1917, no vessel en route from America to France or from France to America, when escorted by American vessels based on France, had ever been torpedoed or successfully attacked on the high seas.

The *Jarvis* (Lieutenant Commander R. C. Parker), and the *Drayton* (Lieutenant Commander G. N. Barker), two of the 740-ton oil-burning destroyers, joined the force on February 15, 1918; then on March 4th, the *Wadsworth* (Lieutenant Commander C. E. Smith). The following destroyers that had also previously operated out of Queenstown were sent to Brest in June:

Sigourney, (Commander W. N. Vernou); *Wainwright,* (Commander R. A. Dawes); *Fanning,* (Lieutenant Commander F. Cogswell); *Tucker,* (Lieutenant Commander W. H. Lassing); *Winslow,* (Lieutenant Commander F. W. Rockwell); *Porter,* (Lieutenant Commander A. A. Corwin); *O'Brien,* (Commander M. K. Metcalf); *Cummings,* (Lieutenant Commander O. Bartlett); *Benham,* (Lieutenant Commander F. J. Fletcher); *Cushing,* (Commander W. D. Puleston); *Burrows,* (Lieu-

tenant Commander A. Steckel); *Ericsson,* (Lieutenant Commander R. R. Stewart); and on July 23, the *McDougal,* (Lieutenant Commander V. K. Coman).

The Navy Department had decided that all additional destroyers built would be sent to Brest and to Gibraltar, and Admiral Wilson's forces were augmented from time to time by these new destroyers:

Little, (Captain J. K. Taussig); *Conner,* (Captain A. G. Howe); *Taylor,* (Commander C. T. Hutchins); *Stringham,* (Commander N. E. Nichols); *Bell,* (Lieutenant Commander D. L. Howard); *Murray,* (Lieutenant Commander R. G. Walling); *Fairfax,* (Lieutenant Commander G. C. Barnes).

For more than a year American mine sweepers pursued their dangerous but tedious task, sweeping up mines and keeping clear the channels leading to ports. Mainly converted fishing boats, the constant duty along the coast was not easy for them. The *Rehoboth* foundered off Ushant in a heavy sea October 4, 1917. Steaming in a fog near Concarneau, January 12, 1918, the *Bauman* struck one of the numerous rocks that make navigation in that region so dangerous. Though she was badly damaged, Ensign P. J. Ford, her executive officer, and several of her crew remained aboard, hoping to save her, and the *Anderton* started to tow her to Lorient, but she sank before reaching port. Soon afterwards, on January 25, the *Guinevere,* attempting to get to Lorient in a dense fog, ran on the rocks.

The mine force was not infrequently called upon to reinforce coastal convoys or go to the aid of vessels grounded or in distress. When the U-boats began attacking coastal convoys near Penmarch in January, 1918, the sweepers were sent out to patrol those waters at night. Lying in darkness, they spent long hours listening through the "C" tubes for any sound of a "sub." They were often hurried out to sweep mines discovered at various points. In a heavy sea, the *Hinton, Cahill* and *James* swept up a mine field near Belle Ile in record time, the *James* cutting four mines in fifteen minutes. These are only a few instances of the fine work they continually performed.

Heroes? There were plenty of them in our forces in France, as there were everywhere else in the Navy—men who feared no

danger and, when necessity arose, risked their lives without a thought of self. Hear the story of the *Florence H.* The rescue of her survivors when that munition ship blew up off Quiberon Bay, April 17, 1918, is one of the war's most thrilling events.

The night was dark and cloudy, the sea smooth. Steaming along quietly, the convoy was nearing port. At 10:45 someone was seen signaling with a searchlight from the bridge of the *Florence H.* An instant later the vessel burst into flames, which soon enveloped the ship, and rose a hundred feet into the air. In ten minutes the vessel split open amidships and five minutes later went down, blazing like a torch. Smoke and flames prevented those on the ships around from seeing what had occurred aboard the steamship. Survivors reported later that there was a tremendous explosion in No. 2 hatch which lifted the deck and blew out the ship's starboard side. Her chief engineer, John B. Watson, said: "She just burned up and melted in about twenty minutes."

The whole thing occurred so suddenly that a naval commander, as he saw the flash, remarked: "Not a living soul will get off that ship."

Rescue seemed almost hopeless. The waters around were covered with flaming powder-cases and wreckage, so thickly packed that they spread to leeward like enormous rafts. All over the vicinity ammunition was exploding, shooting flame and gas ten to twenty feet into the air.

As soon as the fire broke out, two naval vessels started for the stricken ship. As they got near, the ammunition on the deck of the *Florence H.* began to explode, showering up like fireworks. Then her guns went off. For the wooden yachts to venture into that sea of flame was almost certain destruction. The destroyers, their decks laden with depth-charges, were in almost equal danger. When the *Stewart* drew near the ship, the senior commander signalled her to be careful. It seemed hardly possible that any of the *Florence H.'s* crew had escaped. But Lieutenant Commander H. S. Haislip heard cries in the water. That meant that there were men still alive, struggling in that horror.

There was only one way to rescue them. That was to plough through the blazing wreckage. Haislip knew what chances he

was taking, risking his ship and crew. But it was to save human lives and he did not hesitate a moment. The *Stewart* led the way, and the other destroyers, the *Whipple* and the *Truxtun*, followed. Pushing through bursting powder-casks, and burning boxes, they made a path for the other ships.

Lines were thrown out and seamen jumped overboard to hold up men who were blinded or drowning. Lifeboats put out from half a dozen ships. The flames lit up the whole area so that it was almost as bright as day. Men could be seen clinging to ammunition boxes, and the rescuers rowed or swam to them.

Three men were found in a blazing lifeboat hemmed in by wreckage. A naval vessel steamed alongside and pulled them aboard. F. M. Upton, quartermaster third class, and J. W. Covington, ship's cook, plunged overboard to rescue a sailor too exhausted to help himself. Chaplain William A. Maguire assisted in the rescue, going out in a lifeboat which had to pole its way through the smouldering wreckage. Surgeons J. A. Flautt and G. E. Cram and Pharmacist's Mate W. Lorber were out in small boats, giving aid to the wounded, many of whom were burned about the head and arms.

Lieutenant (junior grade) M. L. Coon, took a boat into the wreckage and rescued three men. A motor-boat in charge of Lieutenant H. R. Eccleston ploughed its way through to a man who could not be reached by the rowers. Other boats were assisting in the rescue, directed by Lieutenant (junior grade) H. E. Snow, and Ensigns William O. Harris, Sherburne B. Rockwell and R. A. Johnston.

All the naval vessels did splendid work—the destroyers *Stewart* (Lieutenant Commander Haislip); *Whipple* (Lieutenant Commander H. J. Abbett), and *Truxtun* (Lieutenant Commander J. G. Ware); the yachts *Wanderer* (Lieutenant Commander P. L. Wilson); *Sultana* (Lieutenant Commander F. A. LaRoche); *Christabel* (Lieutenant Commander M. B. McComb), and *Corona* (Lieutenant H. H. J. Benson). More than a dozen officers and fifty enlisted men performed deeds for which they were officially commended. Upton and Covington were awarded the Medal of Honor. But Haislip, born in Virginia, appointed to the Naval Academy from Wisconsin, his later home in California, won most distinction, the highest honors we could bestow.

The French Vice Admiral praised his courage and decision, saying that he exhibited not only "superb contempt of danger," but, "remarkable qualities of seamanship."

Thirty-two of the 77 men aboard the *Florence H.* were rescued. Had it not been for the heroic work of these men of the Navy, not one would have escaped alive.

Thrilling as Victor Hugo's description of the cannon which broke loose and threatened the ship, was John Mackenzie's wrestle with a depth-bomb on the *Remlik.* A storm was raging in the Bay of Biscay, and the *Remlik,* patrolling off the French coast, was having a hard time weathering the gale. Suddenly a periscope was sighted, and there was a cry from the lookout: "Submarine 400 yards off starboard beam!"

"General quarters" alarm was sounded, and stations manned. Heavy seas were breaking over the vessel, but the after gun's crew stayed at its post, trying to get a shot at the U-boat. Before they could fire the submarine submerged. Then followed one of the queerest of situations at sea, patrol ship and submarine both so tossed by wave and wind that they could not use their weapons against each other.

The U-boat poked up its double periscope three times, each time submerging as she saw the patrol ship's guns turned toward her. She could not launch a torpedo with any success in that raging sea; neither could the *Remlik* drop a depth-bomb on her, as the *Remlik* could make only two knots against the gale and a bursting depth-charge might damage her as much as it would the "sub." There they maneuvered like two tigers, unable to spring at each other. After a few minutes the submarine, which had never shown enough of herself for our gunners to plant a shell in her, finally submerged and stayed under. The Americans kept sailing over the locality, hoping she would reappear; but, not wanting to risk a gunfire contest, the "sub" had given up the fight.

Tossed about by that stormy sea, a more imminent danger threatened the *Remlik.* The waves breaking over the stern tore loose one of the huge depth-bombs. The box that held it fell overboard, but the bomb was hurled in the opposite direction. There it went, rolling around the deck, while the crew amidships watched it with the fascination of danger.

BREST, CENTER OF THE GREAT SYSTEM OF NAVAL OPERATIONS IN FRANCE

A GERMAN "SUB" AND SOME OF ITS ENEMIES

Above: The German submarine UC-56 in internment at Santander, Spain, where it was forced by the Christabel, the smallest of the American armed yachts in European waters.

Inset: High officers of the French and American Navies. Left to right: Vice Admiral Moreau, Assistant Secretary Roosevelt, Vice Admiral Schwerer, Rear Admiral Benoit, Vice Admiral Wilson.

Below: Patrol Boats and Sub-Chasers at Finisterre Dock, Brest, Base Section Number 5.

"The safety-pin's come out!" some one shouted.

They all knew what that meant. If the firing mechanism should hit, sending off that bomb; if its 300 pounds of TNT should explode, the *Remlik* would be shattered.

To catch and hold that heavy bomb, with the vessel rolling and pitching as it was, seemed almost impossible. Even to venture into that part of the ship was to risk life. The seas were breaking over it, threatening to sweep off anyone who went down the deck. All knew the ship faced destruction; that anyone who went after that bomb risked being swept overboard or blown to pieces. But quickly a voice rang out:

"Watch me; I'll get it!"

Mackenzie dashed down the deck and flung himself upon the plunging cylinder. He almost had his arms around it, when it broke away. He jumped for it again, and again it tore loose from him.

"Hey!" he yelled. "Stand by and lend a hand. It won't do for this colt to get away from me."

As he grabbed for it the third time, the big charge lurched, and falling, came near crushing him. But he caught his footing, and on the fourth attempt got a firm grip on it. Exerting all his strength, he heaved the "can" up on end, and then sat on it and held it down. Holding on firmly, he managed to retain his grip until lines could be run to him, and the bomb lashed down. Mackenzie had risked his life, but he had saved his ship and shipmates.

Recommending that the Medal of Honor be bestowed on Mackenzie, the first reservist to whom it was awarded, the commanding officer of the *Remlik* said:

> Mackenzie, in acting as he did, exposed his life and prevented serious accident to the ship and probably loss of the ship and entire crew. Had this depth-charge exploded on the quarterdeck with the sea and wind that existed at the time, there is no doubt that the ship would have been lost.

There was no more striking instance of resourcefulness and good seamanship than the double service of the Americans in rescuing the survivors of the French light cruiser *Dupetit Thouars,* and salvaging and taking 350 miles to port the Ameri-

can steamship *Westward Ho*. The steamer was in a convoy from New York to the Bay of Biscay which had been escorted across the Atlantic by the French cruiser. At 10 o'clock, the night of August 7, 1918, the *Dupetit Thouars* was torpedoed, and soon sank. The destroyers *Winslow, Porter, Drayton, Tucker, Fanning* and *Warrington* went to her aid and rescued the survivors.

The next morning at 6:40 the destroyers caught a distress signal, found that the *Westward Ho* had been torpedoed, and took aboard her crew. The American yachts *May* and *Noma* and the French sloop *Cassiopee* soon afterwards arrived and found the ship still afloat. But she was apparently in a sinking condition, so deep in the water that attempts to tow her failed. A volunteer crew from the *May* headed by Lieutenant T. Blau, went aboard and though they had no experience with oil burning or turbine machinery, got up steam, started the pumps, and at last got the engines going. She was so deep in the water forward that they could not make much headway steering the ship bow first. So the volunteer crew turned her around, and with the two yachts towing and the French sloop looking out for submarines, ran that big steamship backwards three hundred and fifty miles, and got her safely into harbor.

A week later another surprising feat was accomplished. Proceeding in convoy 400 miles from the French coast, the *West Bridge,* on August 15, stripped her main turbine and lay helpless. She had hardly sent a radio to Brest, asking assistance, when the convoy was attacked by a submarine. The *Montanan* was torpedoed, and after she went down, the U-boat turned its attention to the *West Bridge.* Struck by two torpedoes, she was apparently about to founder. But the destroyer *Smith* went to her aid, and a volunteer crew under Lieutenant R. L. Connolly went aboard the disabled steamer. There was no possibility of raising steam. She had to be steered by hand. Eventually four tugs arrived and with the yacht *Isabel* started to tow. The well-deck forward of the ship's bridge was flush with the sea, the waves broke over her in a constant roar. Holds, engine and fire rooms were flooded. Keeping her afloat and keeping her moving was slow and hard work. For five days and nights those men struggled to save that ship, and at last they got her to port.

When she reached Brest they beached her on a flat. The officers who examined her for repairs declared she did not have a hundred tons of positive buoyancy, hardly enough to keep her up an hour. Yet those Navy men had kept her afloat for five days and pulled her four hundred miles to port!

The spirit of America in Europe, its high ideals, the attitude of officers and men could not have been better expressed than in this open letter of Admiral Wilson to the forces under his command in France:

We are guests in the house of another people. Our home will be judged by our conduct in theirs. We still live under the rules, laws, and spirit of the place from which we come.

Every great nation in history has stood for some one definite idea: Greece for beauty, Rome for law, Israel for religion. America, in the eyes of the world, stands preëminently for freedom and the ideal of manhood. We must not shake that opinion but do all that we can to strengthen it.

We have come to this side of the world to record, by the indelible imprint of arms, our protest against that which is brutal, wicked, and unjust, to give expression to that measure of indignation stirred in the hearts of America by the deeds of terror which the enemy has written across the face of France. Our Nation stands for everything that is contrary to the spirit of arrogant power and tyranny. Let us prove that by our lives here.

The only history of America that many of the people of Europe will ever read is that which is recorded by our lives.

Live here the proud, manly existence that is justly expected.

Be courteous, temperate and self-controlled.

We fight against the Hun's ill-treatment of women; let no man be tempted to do, by insinuation, what we charge our enemies with doing by force. Let the women of France remember the men of America as those who would shield them against all harm, even that which might spring from their defenders.

You would fight the man who insulted your uniform; do not insult it yourself. Let it not be carried into places of disrepute or into any discrediting act. We are here for a great, high, and solemn purpose. Let every personal desire be subordinated to that righteous purpose, then we will return to our homes clean and proud and victorious.

CHAPTER XI

GIBRALTAR AND THE CONVOY

AMERICAN VESSELS ESCORTED NINETY PER CENT OF SHIPPING BETWEEN ENGLAND AND MEDITERRANEAN—GREAT WORK ACCOMPLISHED BY SHIPS UNDER COMMAND OF ADMIRAL NIBLACK—U. S. NAVAL FORCES MADE POSSIBLE OPERATION OF CONVOY SYSTEM, ONE OF THE MOST EFFECTIVE MEASURES OF THE WAR.

GIBRALTAR was the gateway through which passed one-fourth of all the shipping of the Allies. When the convoy system was applied to the Mediterranean, July, 1917, it became the principal convoy port of the world.

United States naval vessels furnished ocean escort both going and returning for 90 per cent of all convoys between Gibraltar and Great Britain—200 of the 225 groups which sailed, 4,269 ships, representing 12,000,000 gross tons. The Mediterranean escort protected 5,120 vessels; our destroyers in that region, 1004; our Marseilles escort 73; and our men-of-war accompanied 12 other special ships, transports, cable layers and submarines. Thus the United States vessels of this force escorted a total of 10,478 ships.

Realizing the strategic importance of Gibraltar, the Navy Department, on July 5, 1917, decided to establish a base there, and on July 14th, directed 11 vessels, including gunboats and light cruisers, under command of Admiral Wilson, to prepare for distant service, and sail for Gibraltar at the earliest possible date. This base, one of the most important in Europe, was established by the Navy Department on its own initiative, as had been the bases at Brest and Bordeaux and the Azores. By the time our vessels arrived it became, for protection of Allied shipping, a point of prime importance.

The convoy system was inaugurated in the Mediterranean, by British Admiralty order, on July 22, 1917. Five days after-

wards the first regular convoy of 14 ships sailed for England. August 6th the vanguard of the United States naval vessels, the cruiser *Sacramento* (Captain T. T. Craven) reached Gibraltar. On the 17th Admiral Wilson arrived in the *Birmingham* (Captain C. L. Hussey), followed next day by the *Nashville* (Captain H. E. Yarnell). Other ships followed—the gunboats *Castine* (Captain W. C. Asserson), *Machias* (Commander Austin Kautz), *Wheeling* (Commander H. W. Osterhaus), *Paducah* (Commander H. H. Royall), the cruiser *Chester* (Captain Philip Williams), the Coast Guard cutters *Seneca* (Captain W. J. Wheeler), *Manning* (Lieutenant Commander A. J. Henderson), *Tampa* (Lieutenant Commander Charles C. Satterlee), *Ossipee* (Lieutenant Commander W. H. Munter), *Yamacraw* (Lieutenant Commander Randolph Ridgely), *Algonquin* (Lieutenant Commander G. C. Carmine), the converted yachts *Yankton* (Lieutenant G. E. Lake), *Nahma* (Lieutenant Commander E. Friedrick), *Druid* (Lieutenant Commander J. F. Connor), *Wenonah* (Lieutenant Commander P. E. Speicher), *Arcturus* (Lieutenant Commander C. F. Howell), *Lydonia* (Lieutenant Commander R. P. McCullough), *Cythera* (Lieutenant Commander W. G. Roper), *Wadena* (Lieutenant Commander W. M. Falconer), and *Venetia* (Commander L. B. Porterfield), the Coast and Geodetic Survey vessel *Surveyor* (Commander R. E. Pope), the destroyers *Bainbridge* (Lieutenant T. A. Thomson, Jr.), *Barry* (Lieutenant H. P. Sampson), *Chauncey* (Lieutenant Commander W. E. Reno), *Dale* (Lieutenant Roy Pfaff), *Decatur* (Lieutenant Ralph R. Stewart), *Gregory* (Commander A. P. Fairfield), *Dyer* (Commander F. H. Poteet), *Stribling* (Commander G. C. Logan), *Luce* (Commander R. C. Parker), *Israel* (Lieutenant Commander G. N. Barker), *Maury* (Commander J. H. Newton), *Lansdale* (Lieutenant Commander C. W. Magruder), and *Schley* (Lieutenant Commander R. C. Giffen), and the destroyer tender *Buffalo* (Captain C. M. Tozer).

American vessels took a prominent part in escort duty practically from the beginning of convoy in that region, becoming in a short time, the largest factor in the system. In the latter part of October, Admiral Wilson was ordered to command our forces on the French coast, and was succeeded by Admiral A. P. Niblack, who directed our forces at Gibraltar to the end of the

war, with fine judgment and ability. He and his force became a tower of strength in that region, to the Allies as well as our own Navy.

As the American vessels arrived, they were immediately placed on duty with convoys and as danger-zone escorts. The ships of the Allies were employed almost exclusively in the Mediterranean, with headquarters at Malta, and our naval vessels did nearly all the escort duty between Gibraltar and the United Kingdom. They also convoyed over 4,000 vessels in local Mediterranean traffic, or bound for Mediterranean and Far Eastern ports; ships supplying the American army through Marseilles, the French forces in North Africa; the Allied armies at Salonika; the British in Egypt and Palestine; and the forces of Italy.

Soon after our vessels arrived in August, 1917, Rear Admiral H. S. Grant, British Royal Navy, senior naval officer in command at Gibraltar, drew up the plans by which the "H. G." (Home-Gibraltar) and "G. H." (Gibraltar-Home) convoys were organized between the United Kingdom and the Mediterranean. These also included ships bound to and from French ports in the Bay of Biscay and ships bound to the United States. Destroyers, sloops and special service vessels accompanied each convoy as a danger-zone escort through the Straits of Gibraltar to 10 degrees west longitude and there waited for, or met, an incoming convoy from England. Men-of-war acted as ocean escort to the convoys from that point to British waters, where they were met by a danger-zone escort at the end of the route.

At the beginning of October, 1917, a system of fast convoys, sailing every sixteen days, between the United Kingdom and Port Said, and vice versa, was organized. These were met at a rendezvous in approximately longitude 10 degrees west by naval vessels which escorted them to Gibraltar, where they were relieved usually by ships from the Malta command, to take them through the Mediterranean. These convoys were joined at Gibraltar by ships of over 10½ knots speed, which were taken out by relief escorts and joined the convoy off Europa Point. The first of the through outward-bound convoys, *O. E. 1* (outward eastward) passed Gibraltar October 11th, and the first through homeward bound convoy, *H. E. 1,* passed on November 26th.

By December most merchantmen which arrived at Gibraltar had been in convoy at one time or another, and it was possible to sail ships bound for North and South American ports in separate small convoys, with one master and commodore, escorted through the danger zone to longitude 10 degrees west. Between that time and the middle of February, 1918, 207 ships were thus sailed to the Americas.

More escort ships being available, and enemy submarine cruisers becoming active, ships for United States and South American ports were, beginning February 27, formed into convoys, two, a fast and a slow one, sailing on the same day, each accompanied by the danger-zone escort to longitude 30 degrees west, then proceeding "on their own" to longitude 70 degrees west to be dispersed to their proper destinations. Under this revised system there were sailed to American ports 1,013 ships, totalling 4,371,063 gross tons. These were called W. A. Convoys (Western Atlantic).

The main artery for supply of the Allied armies operating in Egypt, Palestine, Greece, Italy, Northern Africa and Southern France ran through the Gibraltar area, requiring a great amount of offensive work against enemy submarines, in addition to escorting convoys. Patrol of the Straits was carried on by torpedo boats, motor launches, sub-chasers and vessels of small displacement, entailing hardships and exposure in every kind of weather.

Numerous attacks on U-boats were reported in this region. The British Admiralty credited the *U. S. S. Lydonia* (Lieutenant Commander R. P. McCullough) and *H. M. S. Basilisk* with sinking a submarine while escorting a Mediterranean convoy, May 8, 1918. In latitude 38 degrees 06′ north, longitude 3 degrees 3′ east, the *Lydonia* sighted the wake of a torpedo which sank the British steamship *Ingleside.* The British and American ships immediately attacked, dropping a barrage of depth-charges, which destroyed the enemy. The submarine was the German UB-70, and the British Admiralty awarded these vessels the credit, rarely given, of "known sunk."

Commander Richard P. McCullough, commanding the *Lydonia,* was officially commended by the British Admiralty and the British senior naval officer at Gibraltar, as well as by our

own authorities. Lieutenant Claud F. Reynaud, the executive officer, was also given special commendation. Sighting the torpedo at the instant it was fired, Reynaud started his stop-watch, timed the run of the torpedo, made immediate change of course to the position of the submarine and noted its bearings. This enabled the commanding officer to track the probable movements of the submarine, which was destroyed by depth-charges from the *Lydonia* and the *Basilisk*.

Credit was also given for the sinking of a submarine by the *Wheeling, Surveyor* and *Venetia*. While on escort duty, May 15, 1918, in latitude 36-03 N., longitude 1-47 W., these vessels sighted the track of a torpedo which struck a merchant ship of the convoy. They dashed down the wake made by the U-boat's periscope, dropping depth-charges which soon put the submarine out of business.

The notable record of the *Venetia* is recited in Admiral Niblack's recommendation of its commanding officer, Commander L. B. Porterfield, for special commendation:

While escorting Gibraltar-Bizerta convoy, on May 11, 1918, an enemy submarine, which was not seen, torpedoed the French steamship *Susette Fraisenette* at 3:39 a. m. With excellent judgment he assumed that submarine had dived under the convoy, and in following out the theory sighted the submarine on the surface at daylight, compelling it to submerge. This submarine was subsequently sunk in the Adriatic, and the survivors testified that the attack of the *Venetia* on this occasion drove them off, and saved the convoy from further attack. Commended in British Senior Naval Officer's letter 78-14 of 24th May, 1918, and British Commander-in-Chief's Mediterranean letter No. 2089-93 of 23 June, 1918.

While escort to Gibraltar-Bizerta convoy on May 17, 1918, the British steamship *Sculptor* was torpedoed at 6:48 p. m. Submarine was not seen, but the *Venetia*, having been previously detailed to attack with depth-charges, and remain behind four hours to keep down submarine, did so. At 7:02 p. m. wake of submarine was sighted and depth-charges dropped. On May 18th an enemy submarine interned at Cartagena, Spain, and was officially assumed to have been damaged by the *Venetia*.

While on escort duty, Gibraltar-Genoa, the British steamship *Messidor* was torpedoed at 7:24 p. m., July 23, 1918, and the *Venetia* instantly made attack, dropping thirteen depth-charges on prearranged plan.

The cruiser *Chester* had two encounters with submarines. While on convoy duty November 9, 1917, it attacked with gunfire

a submarine which had sunk one of the vessels of the convoy, compelling the U-boat to submerge. On September 5, 1918, at 1:04 a. m., the *Chester,* on ocean escort, sighted a submarine close aboard on the starboard bow. First the cruiser attempted to ram the enemy, then attacked the undersea craft with depth-charges, which apparently damaged the U-boat.

Four days later a submarine attacked Convoy GGA-54, torpedoing and sinking the British steamship *Arabis.* The *Paducah* attacked with depth-bombs and, according to reports, damaged the submarine. The *Seneca* cn September 16th drove off a submarine which attacked Convoy OM-99. The *U. S. S. Druid* and *H. M. S. Gilia* repulsed an attack on Convoy BG-65, on September 22nd. Escorting Convoy BG-67, on September 30th, the *Seneca* sighted a periscope and attacked with depth-charges and gunfire.

Convoy BG-68, escorted by the *Cythera,* was attacked the night of October 3rd, and two steamships, the British *Ariel* and the French *St. Luc,* were torpedoed. The *Cythera* went for the submarine, laying a pattern of depth-charges. While being escorted through the Straits of Gibraltar by *H. M. S. Defender* and the *U. S. S. Decatur, H. M. S. Britannia* was torpedoed and sunk at 7 a. m., November 9, 1918. The *Decatur* attacked with depth-charges. The same day a torpedo was fired at the *Parker,* which was on temporary duty on the western barrage line, in the Straits. But the torpedo missed, and the *Parker* went after the U-boat, dropping depth-bombs around her.

German submarine activity around Gibraltar continued up to the very end of hostilities. On November 10, 1918, the day before the armistice, the *Israel,* which was operating on the barrage line with a sub-chaser, discovered and attacked a U-boat, and the same day Sub-chaser Unit C, while patrolling off Point Boassa, also made contact with a submarine.

Two vessels of the Gibraltar force were lost—the destroyer *Chauncey,* sunk in collision with the British steamship *Rose,* November 19, 1917, and the Coast Guard cutter *Tampa,* sunk in British waters September 30, 1918.

The six little destroyers sent from the Philippines to Gibraltar made the long voyage of 12,000 miles under their own steam, arriving in October. The work they did was amazing,

when their small size and age are considered. One of them, the *Decatur,* 420 tons displacement, which had been condemned as not seaworthy enough to venture out of sight of land, successfully negotiated the long voyage from Manila, and in service at Gibraltar steamed over 48,000 miles, making a total of 60,000 miles steaming before her departure for the United States.

The *Wenonah,* an armed yacht of hardly more than 200 tons, steamed in escort work 29,979 miles. The U. S. Coast Guard cutter *Seneca,* which arrived at Gibraltar September 4, 1917, escorted 600 ships in convoys, carrying total cargoes of 2,100,000 tons. These are only a few of the phenomenal records made.

United States naval vessels based on Gibraltar assisted in escorting 562 convoys, and 79 single ships, furnishing an average of fifty per cent of all escorts. Under way 46 per cent of the time and 68 per cent available at all times for operation, our vessels were, in addition to the Gibraltar-England service and danger zone escort, employed in escorting ships to Bizerta, Genoa, Oran and Marseilles. They maintained a monthly service to the Azores, escorted cable ships, and also did other odd jobs.

No vessels performed more convoy duty than these, and Admiral Niblack, who commanded them, thus states what was expected of the system:

(a) That a relatively small number of escort vessels could protect more ships if they were in convoy than in any other way.

(b) That ships in convoy could not be visited and sunk by bombs, as were single ships.

(c) That ships in convoy would not be attacked by gunfire by submarines.

(d) That convoys, being few in number, would be difficult to find and consequently fewer attacks could be made by torpedo.

(e) That in the danger zones near ports where submarines would lay for convoys the escort by antisubmarine craft could be made so strong as to make the risk to submarines very hazardous.

"The great advantage of the convoy," said he, "was that the ships arrived in the danger zone collectively and at a definite time, where an adequate danger zone escort could be assembled, which was fitted with depth-charges and was in such numbers as to make the chances of submarines extremely small if it attempted to attack the convoy."

But, in considering the effect of convoy in lessening sinkings, Admiral Niblack said:

> I think we should take into consideration, as Admiral Mayo points out, the employment of new and offensive measures through the use of the depth-charges, mystery ships, airships, kite balloons, the laying of mine barrages, the firing of torpedoes from Allied submarines, combined with the use of organized patrols fitted with listening devices and hunting the submarine systematically. * * * *
>
> One very important phase of the discussion of the convoy system which has been entirely overlooked is that during the entire war only one escorted convoy crossed from the United States to Gibraltar. * * * All the rest of the million tons of shipping which crossed from the United States to Gibraltar went across as single ships, going "on their own," as it were. These ships depended on their armed guard gun crews, and were independent of the convoy system. They actually encountered submarines, but they relied on their guns for protection.

The convoy system, however, accomplished all that was expected of it, and was markedly successful.

It was our destroyers at Queenstown, our forces on the French coast and at Gibraltar, our cruisers escorting convoys crossing the Atlantic, that made it the success it was—and it was one of the most successful measures of the war.

President Wilson, as I have said, favored its adoption from the beginning; in fact, wondered why the Allies had not adopted it upon the outbreak of war in Europe. It was one of the first measures recommended by the General Board. But at the time this country entered the war, the Allies were pursuing exactly the opposite method; that is, dispersion of shipping.

When troop transportation was first determined upon, in May, 1917, we adopted the convoy system for troop-ships. It was in that month that the British decided to try out the plan for merchant ships, to see whether it would work. The first experimental convoy arrived in England from Gibraltar, May 20. A few convoys were despatched in June, and on June 22 Sims cabled me: "The British Admiralty have now adopted the convoy system and will put it into effect as fast as ships can be obtained for high sea convoy against raiders, and destroyers for escort duty in submarine zone." He reported two routes in operation, stated that eight convoys a week were planned, and recommended that we furnish one cruiser or battleship a week

for high sea escort. On June 30, I informed him that the Department would assign seven cruisers for this duty. Our destroyers were engaged in the danger-zone from the time the first trans-Atlantic convoys were started.

Putting the convoy system into effect was a big job, involving the larger part of the world's shipping—a reversal of method that necessitated a radical change in the naval scheme. Concerning the part the United States Navy played in this great task, Admiral Sims wrote in the *World's Work:*

I do not wish to say that the convoy would not have been established had we not sent the destroyers for that purpose, yet I do not see how it could have been established in any complete and systematic way at such an early date. And we furnished other ships than destroyers, for, besides providing what I have called the modern convoy—protecting the compact mass of vessels from submarines—it was necessary also to furnish escorts after the old Napoleonic plan. It was the business of the destroyers to conduct merchantmen only through the submarine zone. They did not take them the whole distance across the ocean, for there was little danger of submarine attack until the ships reached the infested waters. This would have been impossible in any case with the limited number of destroyers.

But, from the time the convoys left the home port, say New York or Hampton Roads, there was the possibility of the same kind of attack as that to which convoys were subjected in Nelsonian days—that is, from raiders or cruisers. We always feared that German cruisers or raiders of the Moewe type might escape into the ocean and attack these merchant ships, and we therefore had to escort them across the ocean with battleships and cruisers just as they did a century ago. The British did not have ships enough available for this purpose, and here again the American Navy was able to supply the lack; for we had a number of pre-dreadnaughts and cruisers that were ideally adapted to this kind of work.

AT GIBRALTAR, KEY TO THE MEDITERRANEAN

Above: U. S. S. Buffalo, Schley and Jupiter.
Inset: Rear Admiral Albert P. Niblack, commanding American naval forces in the Mediterranean.
Below: The signal tower and American sub-chasers.

THE GREAT MINE BARRAGE AGAINST THE SUBMARINES

This map shows the location of the mine barrage across the North Sea as well as the smaller one across the English Channel. The dangers of this barrage, more than any other single factor, destroyed the morale of the German submarine crews.

CHAPTER XII

SHUTTING UP THE HORNETS IN THEIR NESTS

MINE BARRAGE ACROSS NORTH SEA A TERROR TO U-BOATS—GERMANS PLANNED BIG DRIVE, BUT SUBMARINE CREWS REFUSED TO GO TO SEA—MORALE SHATTERED, KAISER'S NAVY WAS WRECKED BY MUTINY—PROPOSED BY U. S. NAVY IN APRIL, 1917, EIGHTY PER CENT OF BARRAGE WAS LAID BY AMERICANS.

GERMANY planned a great naval offensive in the fall of 1918—that is, the German authorities did, the High Command. Why was it never carried out? Why were the U-boats recalled? Why did the Kaiser's High Seas Fleet surrender without striking a blow?

When Sir Eric Geddes, First Lord of the British Admiralty, visited Washington in October, 1918, he told me that we might expect a decided increase in submarine activity, a German drive at sea. In the official conferences we held, Sir Eric and his associates predicted that, notwithstanding all the efforts we were making, vastly more tonnage might be sunk in the ensuing months. The British were striving to increase ship production, and put as many war vessels as possible into commission.

The next day I telegraphed the leading shipbuilders of the country, asking them to come to Washington. Over 200 destroyers were under construction or contracted for, and rapid progress was being made on them. But I thought that, by special effort, we might rush a larger number to completion. The critical situation outlined by the British authorities was explained to the builders, and they were directed to make construction continuous—to run three shifts of eight hours each, working day, night and Sundays, and to speed up to the utmost on destroyers and all anti-submarine craft. They pledged their earnest assistance, proposing to increase forces, if labor could be secured, and to push the program already undertaken on the highest gear.

While the visit of the British mission as announced was to "discuss certain matters concerning the naval situation," and its conferences were confidential, its members in public statements made clear their belief that easy or early victory was not to be expected.

"I have made it the keynote of all my policy and all my advice to others not to be deluded with hopes of an early peace, but to prepare for an ever-receding duration of the war," said Sir Eric Geddes. "We must always be prepared for two years more, and then only shall we have the sure means of victory in our hands."

More significant still, more to the point, was the remark made by Sir Eric just before he sailed for Europe:

"A great renewed effort on Germany's part is impending. We know it, and its extent."

Before he reached England, U-boat warfare was practically ended. Within ten days the submarines were recalled to their home bases. As they were returning to Germany they sank a few ships. But these were the last few examples of German frightfulness on the seas.

What had brought about that tremendous change? It was not due to any lack of determination on the part of the German Admiralty, or the Kaiser. But they found that the big stick with which they were to strike was only a broken reed. The morale of their navy was shattered. Officers were willing enough to obey orders, but their men refused to fight.

The U-boat crews, for years the pick and pride of the service, refused to go to sea. Germany was building hundreds of submarines, they were being turned out by the score. She might soon have sent out a dozen for every one she had when ruthless warfare began. But willing crews were lacking to man them.

This was a complete reversal of previous experience. A year before U-boat duty had been the most sought-for branch of the service. Essaying long voyages in the Atlantic or the Mediterranean, cruising for weeks around the waters of England and France, their officers and men had braved many dangers, and returning were hailed by their countrymen as conquering heroes.

Sinkings had been made more difficult by the convoy system. Listening devices had made it more dangerous for submarines

to remain in the vicinity of naval vessels. Patrol, by surface ships and aircraft, had become more efficient. Shipping was more difficult to get at and destroy. More submarines were being sunk than in the early days. But, with all these operating against them, the U-boats, even if they could not make such high scores in tonnage, had more than an even chance to reach their home bases unscathed.

Now was another danger to face, however; one that was hidden and deadly, and it had to be faced by every boat departing or returning. Some U-boats, putting out to sea from their nesting places on the German coasts, vanished utterly. No trace was left, no record of what fate befell them.

Others, badly damaged, limped back to port. Survivors told of colliding with mines hidden far below the surface, whose presence could not be guessed. No vigilance could locate or action avoid them. They might run into them anywhere within hundreds of miles. This was a terror the undersea boatmen were unwilling to face. The revolt of the U-boat crews spread to other branches of the naval service, and the entire German navy began to disintegrate.

The mutiny in the German sea forces, the demoralization of its personnel, has no parallel in naval history. This was undoubtedly due to various causes, but, in my belief, there was no one thing that had more influence in breaking the German morale, particularly in the U-boat service, than did the Northern Mine Barrage.

Stretching across the North Sea, from Norway almost to the Orkneys, this heavy barrier of powerful mines opposed any enemy vessels which attempted to make their way around the north of Scotland into the Atlantic. The Germans had only two exits from the North Sea, the one covered by this mine barrier, and, to the south, the narrow Straits of Dover, also partially mined and guarded by the famous Dover Patrol.

It was a new factor in war, this vast barrage, the most successful innovation, the biggest new naval offensive put forth after our entrance into the war. American in conception, it was also mainly American in construction. A joint British and American undertaking, as it was, four-fifths of the mines laid were of American design and manufacture, made in this country,

taken across the Atlantic in American ships, and laid by American naval vessels.

Though not actually laid until the summer of 1918, this was the first big project proposed by the United States Navy after our entrance into the war. In fact, it was only nine days after war was declared that the Bureau of Ordnance presented an elaborate memorandum, outlining the proposition. But the British Admiralty, without whose consent and coöperation it could not be constructed, and Admiral Sims pronounced it "impractical" and "unfeasible." It was not until six months later that we secured the Admiralty's approval, and the great project got under way.

The first mine was laid on June 8, 1918. "The barrier began to take toll of the enemy's submarines as early as July 9, when one was disabled on the barrier and compelled to return to Germany," reported Admiral Joseph Strauss, commander of American mining operations in the North Sea. "It is not known how many submarines were sunk or disabled in the mine field. It has been placed as high as twenty-three. My own estimate, based on known sinkings, is ten, although I am inclined to think that is a modest one."

Captain Reginald R. Belknap, commander of Mine Squadron 1, says the barrage began to yield results before it was half way across. "From the nature of the case it may never be known definitely how many actually did come to grief there," he said; "but the best information gives a probable ten before the middle of October, with a final total of seventeen or more. In addition to this toll, the squadron should be given credit for two submarines lost in the field of British mines laid by the *Baltimore* off the Irish coast."

Eight and one-half per cent of the total number of submarines lost during the war were brought into the list of missing by the barrage, was the estimate of Admiral Ralph Earle, Chief of the Bureau of Ordnance, under whose administration and leadership the mine barrage was conceived, projected and constructed. Admiral Earle reported to me:

> It has been established that six submarines were lost in the barrage and three more so badly damaged that they never again put to sea. However, from further evidence, the British Admiralty officially credit

PLANTING MINES IN THE NORTH SEA

A squadron of American mine planters at work. Inset: Rear Admiral Joseph Strauss, who was in general command of mining operations.

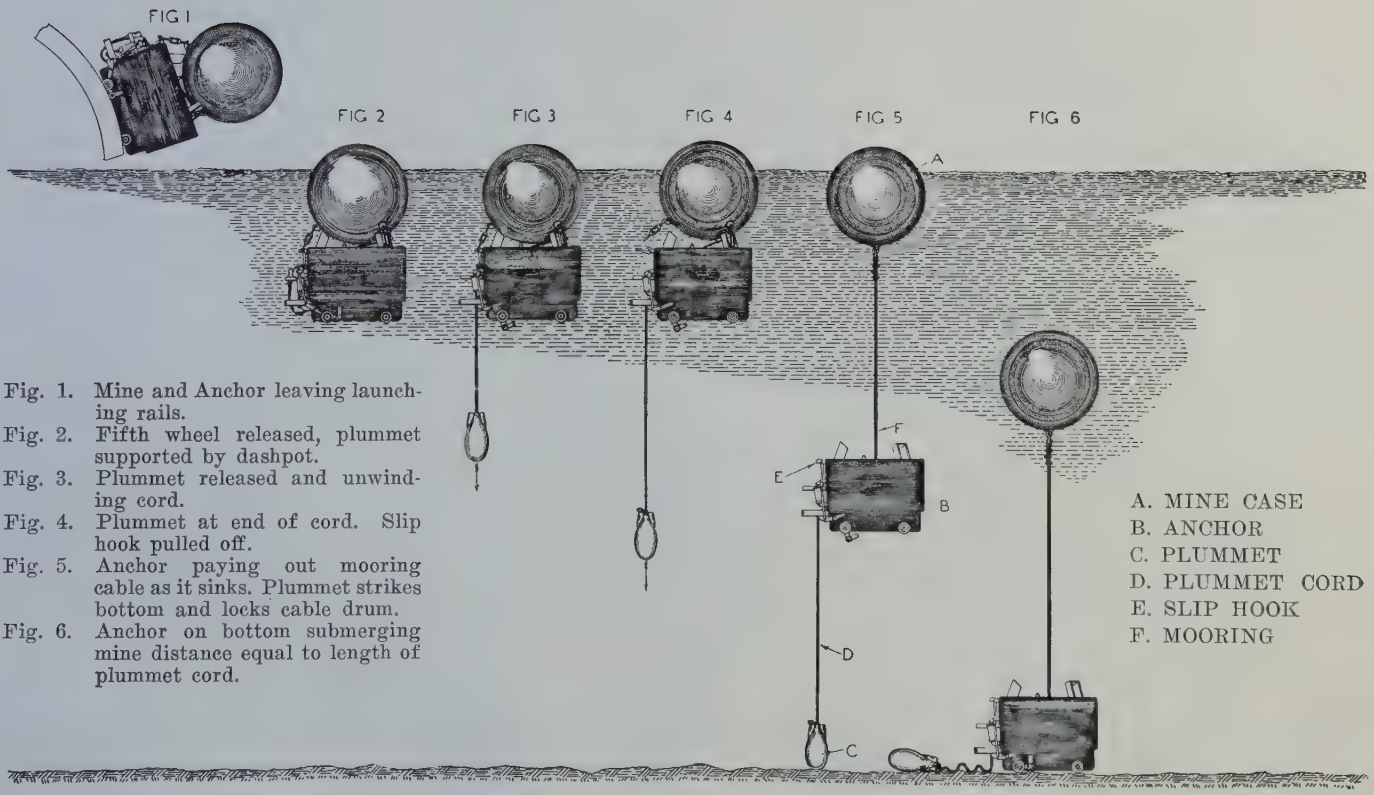


Fig. 1. Mine and Anchor leaving launching rails.
Fig. 2. Fifth wheel released, plummet supported by dashpot.
Fig. 3. Plummet released and unwinding cord.
Fig. 4. Plummet at end of cord. Slip hook pulled off.
Fig. 5. Anchor paying out mooring cable as it sinks. Plummet strikes bottom and locks cable drum.
Fig. 6. Anchor on bottom submerging mine distance equal to length of plummet cord.

A. MINE CASE
B. ANCHOR
C. PLUMMET
D. PLUMMET CORD
E. SLIP HOOK
F. MOORING

HOW THE BIG MINES IN THE NORTH SEA BARRAGE WORKED

the barrage with fourteen additional, or a total of twenty-three. Two hundred German U-boats were destroyed in the war, or fifty more than the Allies could account for. To err on the conservative side, we claim but eight out of the fourteen credited the barrage by the British Admiralty, or a total of seventeen. This is also the figure arrived at by Captain R. R. Belknap, commander of Mine Squadron 1. What does this figure show? Eight and one-half per cent of the total number of submarines lost during the war were brought into the list of missing by the barrage, which existed for only six per cent of the period of the war. Such results more than justified the effort and time and funds expended.

The barrage did more than take toll of submarines sent to kingdom come by its mines. "There is no doubt," reported Sims in the "Summary of Activities of American Forces in European Waters," "that the barrage had a considerable moral effect on the German naval crews, for it is known that several submarines hesitated some time before crossing. Also, reports from German sources are that the barrage caused no small amount of panic in some of the submarine flotillas. It is also probable that the barrage played a part in preventing raids on Allied commerce by fast enemy cruisers."

Admiral Strauss, in his testimony before the Senate Investigating Committee, declared that if the Northern Barrage and that across the Straits of Dover had been fully completed as we planned, "it would have ended the submarine menace, so far as submarines going from the North Sea into the Atlantic were concerned;" and that the building of the mine barriers across the Adriatic and Aegean seas, for which we were preparing materials, "would have actually ended submarine operations."

Could it have been built in 1917, a year earlier than it was? Strauss said it could, and this was the firm belief of Earle and other ordnance experts. True, the antenna mine we developed later was a big improvement, superior to any previously devised. It would have taken two or three times as many mines of the type then in use, perhaps 180,000 of them, as was estimated. We manufactured 100,000 of the antenna type, and could have made as many more, if necessary. The British had no antenna mines, Admiral Strauss pointed out, and all the mines they laid in the barrage were of the older type. After all the

objections were presented to him, Admiral Strauss, when asked if he still considered it would have been feasible to have gone ahead with the barrage in 1917, unhesitatingly answered: "Yes."

Not laying that barrage earlier—in fact, at the earliest possible moment—was, in my opinion, the greatest naval error of the war. If the British had erected it early in the war, and put a similar effective barrier across the Straits of Dover and Otranto, the Germans would have been so restricted that widespread U-boat warfare, with its terrible destruction of life and shipping, would have been impossible.

"Shutting up the hornets in their nests," as President Wilson expressed it, was the first idea that occurred to us when we went to war. The Bureau of Ordnance on April 15, 1917, submitted a memorandum urging that we "stop the submarines at their source" and suggesting that mine barriers be laid across the North Sea, the Adriatic and the Dardanelles. "The northern barrier," it stated, "would extend from the mid-eastern coast of Scotland to the Norwegian coast, a distance of about 250 miles," and the southern (that is, to close the Straits of Dover) would extend "from the southeast coast of England and to a point on the French coast near the Belgian frontier, a distance of about forty miles." Next day I cabled Admiral Sims, who had just arrived in London:

> Is it not practicable to blockade German coast efficiently and completely, thus making practically impossible the egress and ingress of submarines? The steps attempted or accomplished in this direction are to be reported at once.

Two days later came the answer:

> To absolutely blockade the German and Belgian coast against the entrance and departure of submarines has been found quite unfeasible.

The next day he wrote a long letter, amplifying the difficulties and reporting against any such barriers. But our ordnance experts were thoroughly convinced the project was feasible. On May 9th they outlined their plans in a memorandum to be submitted to the British Admiralty, and on May 11th I cabled to Admiral Sims: "Much opinion is in favor of concerted efforts

by the Allies to establish a complete barrier across the North Sea, Scotland to Norway, either direct or via the Shetlands, to prevent the egress of German submarines." I added, "The difficulty and size of the problem is recognized, but if it is possible of accomplishment the situation would warrant the effort." He was directed to consult with the British Admiralty regarding this plan. Two days later came the reply:

> From all experience Admiralty considers project of attempting to close exit to North Sea to enemy submarines by the method suggested to be quite impracticable. Project has previously been considered and abandoned.

In a dispatch on May 14th Sims said: "The abandonment of any serious attempts at blockading such passages as Scotland-Norway, the Skagerrack and Scotland to Shetland has been forced by bitter and expensive experience."

"As may well be imagined," he wrote later, "this whole subject has been given the most earnest consideration, as it is, of course, realized that if submarines could be kept from coming out, the whole problem would at once be solved." But he said, "I cannot too strongly emphasize the fact that during nearly three years of active warfare this whole question had been the most serious subject of consideration by the British Admiralty," which had concluded that no "barrier can be completely effective."

This, however, did not deter our ordnance experts. The more they studied the question, the more were they convinced that the barrier could be "put across." Believing in mines, preparing for mine operations on a large scale, they were astonished when, on May 31st, Sims reported that, instead of our giving attention to mine production, the British Admiralty "consider we can more profitably concentrate on other work."

Earle and his associates in the Bureau of Ordnance never doubted final success. They experimented with mines, firing and anchoring devices, and on July 30th announced the development of a new type of mine, particularly adapted to deep waters. A unique feature of this mine was that it did not have to be struck to explode, but would explode if a submarine passed close to it. This was due to the firing apparatus, which was evolved

from an electrical device submitted by Mr. Ralph C. Browne, of Salem, Mass., to be used on a submerged gun. Officers of the Bureau concluded this could be adapted to mines, and in May began work to that end. Commander S. P. Fullinwider, chief of the Mine Section, was aided by Mr. Browne, Lieutenant Commander T. S. Wilkinson, Jr., and Commodore S. J. Brown in producing this firing device, and others who assisted in developing the mine were Lieutenant Commanders O. W. Bagby, J. A. Schofield, W. A. Corley, C. H. Wright and H. E. Fischer, Lieutenant S. W. Cook and Lieutenant (junior grade) B. W. Grimes.

With this improved mine as an argument, our ordnance officers renewed the proposal of a mine offensive in the North Sea. The memorandum the Bureau submitted was comprehensive, and contained all the essential features of the barrage plan that was later adopted and carried into effect.

How could the project be best presented to the British Admiralty again? Admiral Mayo was preparing to sail within a short time for Europe. Just before his departure the entire project was discussed and the operation of the improved mines explained, as he was to bring the whole matter to the attention of the British Admiralty and the Allied Naval Council. To prevent loss of time and further insure the Admiralty's consideration, on August 17th, before Mayo sailed, I cabled Sims:

> Bureau of Ordnance has developed a mine which it hopes may have decisive influence upon operations against submarines. Utmost secrecy considered necessary. Request that an officer representing the Admiralty, clothed with power to decide, be sent here to inspect and thoroughly test mine, and, if found satisfactory, arrange for coöperation in mining operations.

The Allied Naval Conference, held in London September 4th and 5th, which Mayo attended, took up not only the barrage project, but another proposition our Navy Department had suggested months before, a close offensive in German waters. After the meeting Mayo cabled:

> Conference completed after agreement upon the following points:
> 1. That close offensive in German waters should be carefully considered by Allies, after which they should indicate to British Admiralty contribution of old war ships they are prepared to furnish should offensive prove practicable.

2. That alternative offensive employing effective mine field or mine net barrage to completely shut in North Sea not practicable until adequate supply satisfactory type mines assured, and that pending such supply, extension present system mine fields desirable and that mine net barrage impracticable.

This indicated to us that the British still doubted the effectiveness of a barrage, as well as our ability to furnish an adequate supply of mines. It was evident that, after five months of earnest advocacy, further urging was needed to secure approval of the project. Benson, therefore, on September 12th, cabled Mayo:

There are great possibilities in the satisfactory solution of the mine and depth-charge question. Officers sent over here most satisfactory and remarkably well posted. I think it would help the whole situation wonderfully if Commodore Gaunt could visit the Admiralty for a few days and have a heart-to-heart talk. No time to be lost.

What happened next? The day after Benson's message was received, the British Admiralty made out for Mayo a paper entitled, "General Future Policy, Including Mine Policy," with an appendix, "Mine Barrage Across the North Sea." The policy outlined by the Admiralty, announced September 14th, was the same the Navy Department had suggested nearly five months previous.

Even then there was delay. On October 9th, Sims reported that the Admiralty was "thoroughly investigating the question" and that "the discussion of this question will probably be postponed by the Admiralty until the return of the commander-in-chief." We were still not certain as to whether the British were ready to put it through. But, believing that the plan must finally be put into effect, our Bureau of Ordnance went ahead, and let the contracts for 100,000 mines. Upon Mayo's return October 15th, the amendments suggested by the British were approved by the General Board and accepted by the Department. Nothing definite, however, had come from London and on October 20th Sims was cabled:

The Department requests to be informed whether the plan for the placing of a mine barrier across the North Sea on the Aberdeen-Egersund line has the approval of the Admiralty.

Finally on October 22nd, an answer direct from the British Admiralty said, "Admiralty has approved mine barrier and now confirms approval."

All the details were then perfected—this required several days—and on October 29th I received and approved the completed plans. The President, who for months had been impatient of delay, gave his approval as soon as they were laid before him. This was at a cabinet meeting on October 30th. The same day a cable was sent to the Admiralty that we had taken steps to fit out mine-planters; that shipment of mines would begin the first of January, and officers would be sent in a few days to arrange details.

So after months of opposition, doubt and indecision, the two navies united in the construction of this most stupendous job of the kind ever conceived or undertaken. It was well done and the result demonstrated its effectiveness. Admiral Sims himself, after its completion and success, said that "no such project has ever been carried out more successfully" and that "as an achievement it stands as one of the wonders of the war."

I am not giving these details in any spirit of criticism of the British Admiralty or our representative in London, but to do justice to the vision, initiative and resource of the American Navy. It was, indeed, a bold and gigantic experiment, calling for many millions of money and the strenuous and dangerous work of many men. That it was so successfully done reflects credit alike on Britons and Americans, and both share in the honor of its accomplishment.

Manufacturing 100,000 mines was a big order, but that was only the beginning. They had to be shipped 3,500 miles overseas, which necessitated a fleet of mine-carriers. Twenty-three cargo vessels were converted, and assigned to this duty. To fill the mines with explosives a mine-loading plant of 22 buildings was erected at St. Julien's Creek, Va., capable of receiving, loading and shipping 1,000 mines a day. Advanced bases, for inspection and assembly of the mines, were established in February, 1918, on the east coast of Scotland, at Inverness and Invergordon, with Captain O. G. Murfin in charge.

For the work of mine-laying, a Mine Squadron was created, under command of Captain Reginald R. Belknap. This con-

sisted of the flagship *San Francisco* (Captain H. V. Butler), and her consort, the *Baltimore* (Captain A. W. Marshall), "crack cruisers of the vintage of 1890," as Captain Belknap called them; and eight former merchant vessels converted into naval mine planters. Four of these were Southern Pacific or Morgan liners, carrying freight between New York and Galveston, renamed the *Roanoke* (Captain C. D. Stearns), *Canonicus* (Captain T. L. Johnson), *Housatonic* (Captain J. W. Greenslade), and *Canandaigua* (Commander W. H. Reynolds). Two were the Old Dominion passenger liners *Jefferson* and *Hamilton,* running between New York and Norfolk, renamed *Quinnebaug* (Commander D. Pratt Mannix), and *Saranac* (Captain Sinclair Gannon). The remaining two were the fast Boston and New York passenger steamers, *Massachusetts* and *Bunker Hill,* of the Eastern Steamship Corporation, renamed *Shawmut* (Captain W. T. Cluverius), and *Aroostook* (Captain J. Harvey Tomb). They were accompanied abroad by several seagoing tugs, the *Sonoma, Ontario, Patapsco* and *Patuxent.*

Admiral Strauss, who was in general command of mining operations, went to England in March, inspected the bases, and conferred with the British authorities as to the general arrangements. His flagship was the *Black Hawk* (Captain R. C. Bulmer), which was also the repair vessel of the mine force. The British began mine laying in March, but one of their vessels, the *Gailardia,* was sunk; and operations were suspended for a time until the safety of the mines could be assured.

The *Baltimore,* the first of our vessels sent over, arrived in the Clyde in March. Submarines were very active in Irish waters, and the Admiralty decided to lay a deep mine-field off the north coast of Ireland, in the North Channel. As all British mine-layers were employed elsewhere, the Admiralty requested the use of the *Baltimore.* This was readily granted and the *Baltimore* engaged in this from April 13th until the latter part of May, joining our squadron in Scotland June 2nd. The *Roanoke,* sent over to assist her, was instead ordered to our base at Invergordon.

Sailing from Newport, May 12th, the *San Francisco* and other vessels arrived at Inverness, May 26th, all ready to begin operations. Twelve days later the squadron started on its first

mine-planting "excursion." On these expeditions, which last usually from 40 to 80 hours, the squadron was regarded as part of the British Grand Fleet. Screening it against submarines, and hostile mines casually placed, was an escort of eight to twelve British destroyers, which formed around the squadron upon its leaving the base and kept with it until its return. To guard against attack from enemy cruisers, while away from the coast, the squadron was accompanied by a supporting force, consisting of a battleship or battle-cruiser squadron and a light-cruiser squadron of the Grand Fleet, sometimes by all three, according to the estimated probabilities of attack. On the second mining excursion the support was the Sixth Battle Squadron, the American battleships, commanded by Admiral Rodman. Captain Belknap gave a vivid picture of the dangerous character of mine-laying when he said:

> One may imagine with what feelings we saw our own great ships file out of Scapa Flow, form line on our quarter, and slowly disappear in the haze, as they swept off to the southeastward. It will be readily understood that the way had to be made smooth for the mine planters. As long as it was so, all would go well; but a single well placed torpedo or mine, or a few enemy shells, would certainly finish one vessel, and probably destroy all ten of them. Each mine planter carried from 2 to 120 tons of high explosive, a total of nearly 800 tons in the squadron, many times more than the amount that devastated Halifax. With this on board, the squadron was hardly a welcome visitor anywhere.

Operations as a whole were conducted in conjunction with a British mine-laying squadron of four vessels, under command of Rear Admiral Clinton-Baker. American and British squadrons often went out at the same time, under protection of the same heavy vessels, but except on two occasions they worked separately, in different parts of the barrage area. Thus there were altogether fourteen mine planters at work at the same time.

On the first excursion, June 7th, the American squadron planted a mine field 47 miles long, containing 3,400 mines, in 3 hours and 36 minutes. Everything went without a hitch. One ship emptied herself of 675 mines without a single break, one mine every 11½ seconds through more than two hours, a record never before equalled.

ONE OF THE PERILS OF MINE-SWEEPING

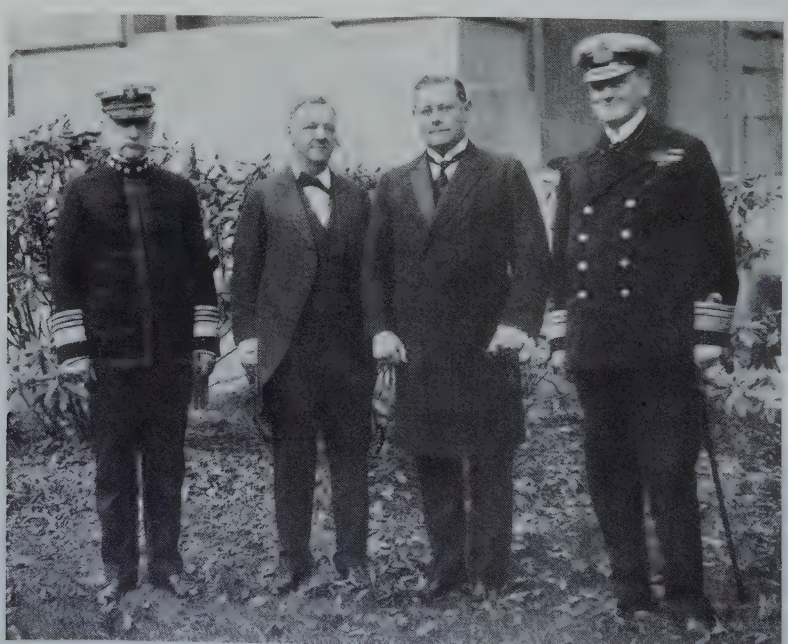
An explosion close astern of the Patapsco. The greatest care was exercised to avoid accidents of this character, but to eliminate them entirely was impossible.

THE MINE-SWEEPERS PROVED WONDERFUL SEA BOATS

These tiny craft rode many a rough sea which worried larger and more powerful ships.

UNITED STATES NAVAL OFFICES IN IMPORTANT COMMANDS

Left to right: Admiral Sims, Admiral Mayo, Captain Nathan C. Twining, Captain O. P. Jackson, Admiral Wilson.



AMERICAN AND BRITISH NAVAL OFFICIALS

Left to right: Admiral Benson, Secretary Daniels, Sir Eric Geddes, Admiral Duff.

Dangerous as was the work, there were very few casualties. One man fell overboard from the *Saranac* and was drowned, but he was the only man lost at sea, and there were but four other deaths in that force of 4,000. Laden with high explosives, navigating waters where enemy mines had been laid, operating near mine fields, and in danger of premature explosion from those they themselves had laid, it is remarkable that not one of these ships was lost or seriously damaged.

The eighth excursion in which British and American squadrons joined, both in command of Admiral Strauss, closed the western end of the barrier, off the Orkneys. The next expedition was conducted in the same manner, with Rear Admiral Clinton-Baker, of the British Navy, in command. The American squadron made fifteen excursions, the British eleven, operations being completed October 26th. In four hours on one expedition, 6,820 mines were planted, 5,520 by our vessels, 1,300 by the British. Our squadron alone planted a field 73 miles long in one day.

Seventy thousand, two hundred and sixty-three mines were laid—13,652 British, 56,611 American. Numerous lines were laid near the surface; others were placed at from 90 to 160 feet; and the lowest went to depths from 160 to 240 feet.

Beginning near the northern Orkneys, the barrier ran to Udsire Light, near Bergen, on the coast of Norway, 230 miles. Its average width was 25 miles, in some places it was 35 miles across, and at no point was it less than 15 miles wide. At its narrowest, this meant more than an hour's run for a submarine. Mines were planted, row after row, at various depths. If a U-boat proceeded on or near the surface, it would encounter from six to ten lines of mines. If it tried to break through by going deeper, there were more of the deadly explosives. Submergence was, in fact, as dangerous as running the gauntlet on the surface. No matter how far the sub went down there were mines to meet it, to the furthest limit of submarine descent. One touch—even a slight jar from the vibration of the U-boat—was enough to set off one of these mines, and when it exploded the U-boat was done for.

Mine-laying was not the only role played by the American force, Captain Belknap wrote:

In addition to the value of the barrage itself, in keeping the enemy submarines in or from their bases, the mine squadrons were expected to serve as bait, to draw out the German fleet; the squadrons' role being neatly expressed by one high officer as "an important military offensive with a front seat at the Second Battle of Jutland." This ever present possibility and the fact that the working ground lay in the principal thoroughfare of enemy submarines, with attendant incidents of periscope sightings, submarine reports, depth charges, smoke screens, floating mines, and dead Germans floating by, lent spice to the work, which, like the proverbial sporting life, was often hard but never dull. * * *

On every excursion, during the mine laying, one or more of the mines would go off fairly close astern—lest we forget! The mines were very sensitive, and no witness of an excursion could retain any doubt as to the fate of a submarine that "luckless dares our silent wake."

The eastern end of the barrage extended to the territorial waters of Norway. That country being neutral we could not, of course, mine to its shores. With the growth of the barrier, U-boats took advantage of this, going within the three-mile limit to slip by into the open sea. The Norwegian Government then announced its decision to mine its waters, which closed that gap.

Our original plan was to plant mines clear to the Orkneys, and this we urged. But Admiral Beatty and others strongly objected, fearing that it might hamper the operations of the Grand Fleet. So the mine-fields ended ten miles east of the islands. But this ten-mile passage was heavily patroled, and any "sub" attempting to pass that way must run the risk of attack by numerous naval vessels. Thus the U-boats could not get through anywhere except at great risk. Months were required to lay that barrier, and during that time there were unmined areas through which vessels could pass.

The barrage was completed October 26th, almost coincident with Germany's recall of its U-boats, which practically ended submarine warfare. Some of those recalled did not reach these waters until the armistice had been signed, hostilities were over, and they were immune from attack. Some "ran" the barrage, and several met the fate of the U-156, one of the undersea cruisers which operated off our own coasts. Attempting to get through the barrier, she struck a mine and went down. So far as known, only 21 of her crew were saved.

The Northern Barrage cost us approximately $80,000,000. Shipping sunk by submarines averaged, for a long period, over $70,000,000 a month, at times ran over $80,000,000, in actual monetary value, not counting the resultant military effect of its loss. Admiral Sims estimates that the war cost the Allies $100,000,000 a day. Thus, if the Northern Barrage shortened the war one day, it more than repaid its cost.

Our mining projects were not confined to the North Sea. Plans had been accepted and mines were in process of manufacture for a like barrage across the Straits of Otranto, from Brindisi, the heel of Italy, to Saseno Island. This would have effectually shut up German and Austrian submarines in the Adriatic. We had also agreed to undertake to provide and lay 26,800 mines for a barrage in the Aegean Sea from Euboea Island to Cape Kanaptitza, except for the part resting on Turkish territorial waters, which was to be established by Great Britain, since the United States was not at war with Turkey. The armistice made these barrages unnecessary.

But our mining operations were by no means concluded with the cessation of hostilities. Clearing the seas was our next duty, for navigation would not be safe until the many thousands of mines were removed. This work was divided among the various nations. The United States volunteered to remove all the mines we had laid.

Admiral Strauss, in charge of these operations, had his base at Kirkwall, and his force comprised 34 mine-sweepers, 24 subchasers, two tugs, two tenders and 20 British trawlers, which were also manned by U. S. naval personnel:

Repair Ships and Force Auxiliaries—*Black Hawk* (flagship); *Panther, Seneca, Chesapeake, Aspenleaf, Crenella,* and the British vessels *Hickorol, Petronel* and *Hopkiln.*

Submarine Chasers—Numbers 37, 38, 40, 44, 45, 46, 47, 48, 95, 110, 164, 178, 181, 182, 206, 207, 208, 254, 256, 259, 272, 329, 354, and 356.

Mine-Sweepers—*Auk, Avocet, Bobolink, Chewink, Cormorant, Curlew, Eider, Falcon, Finch, Flamingo, Grebe, Heron, Kingfisher, Lapwing, Lark, Mallard, Oriole, Osprey, Pelican, Penguin, Quail, Rail, Robin, Sanderling, Seagull, Swallow, Swan, Tanager, Teal, Thrush, Turkey, Whippoorwill, Widgeon, Woodcock, Patapsco, Patuxent.*

Trawlers—*William Johnson, Richard Bulkeley, Thos. Blackhorne, Thomas Buckley, George Cochrane, John Collins, William Caldwell,*

George Clarke, William Darnold, Siam Duffey, John Graham, Thomas Laundry, William Ashton, George Burton, John Dunkin, Thomas Graham, Thomas Henrix, John Fitzgerald, John Clay, Pat Caharty.

I had the pleasure of visiting our mine base in Scotland just before the squadron sailed on its first expedition. Everything was ready for operations. The spirit of officers and men was inspiring. Not minimizing for a moment the difficulties they had to face, all were eager to begin the task.

They were to set forth on April 28th, but the heaviest snowstorm of the year was raging, causing 24 hours delay. The next morning the sweepers and a division of sub-chasers got under way for the barrage, while the *Black Hawk* and other chasers proceeded to the new base at Kirkwall. That excursion, which was experimental, was completed May 2nd.

Mines sometimes fouled in the "kites" which picked them up, and exploded as the sweep was being hauled in. The *Patuxent* was the victim of an accident of this kind on May 12th. Severed by an explosion, its sweep had to be hauled on board to be repaired. When the kite came within sight, a mine was seen hanging by its towing cable. The commanding officer sent all hands forward to a place of safety, going aft himself to clear it, with the assistance of his chief boatswain's mate. When the mine got within ten feet of the ship, it exploded. Several men were blown overboard by the mass of flying water, but all were rescued. The commanding officer had a narrow escape. Only a few feet from the exploding mine, his thumb was cut off by a flying fragment of steel, but luckily he escaped further injury.

Two days later, the same accident befell the *Bobolink,* killing its commanding officer, Lieutenant Frank Bruce, and badly damaging the ship. Seeking first the safety of his crew, Lieutenant Bruce went aft to clear the mine. Before anything could be done, it exploded, killing him and blowing the boatswain and three other men into the water. All four were rescued, though the boatswain was unconscious from the shock. The *Teal* took her in tow and, accompanied by the *Swallow* and sub-chaser No. 45, towed her to Scapa Flow.

While clearing the largest mine-group in June the force found impressive evidence of the success of the barrage. Cross-

ing the lines of mines, the *Heron* and the *Sanderling* were brought to a standstill by an obstruction which fouled their sweeps. Oil rose to the surface, and spread out astern, giving evidence of the wreck of a submarine underneath. This was the locality in which the mine-laying squadron had sighted the body of a German sailor floating in the water. From the records of the Admiralty, it appeared that the obstruction was the wreck of the German submarine UB-127.

Six mines exploded under and around the *Pelican* one day in July. Deluged by the mass of water thrown up by the explosion, the forward part of the ship ruptured and flooded, the mine-sweeper was rapidly sinking. Captain R. C. Bulmer, directing the operations, went at once to her assistance. Placing his flagship, the *Auk,* alongside the *Pelican,* he connected his wrecking hose with the forward compartments, and set the pumps going to keep the damaged ship afloat. The *Eider* got on the other side, and did the same thing. The *Teal* took the three ships in tow, and the four, lashed together, headed slowly for port. The bow of the *Pelican* was hardly above water, but for several hours constant pumping held her up.

Then a heavy head sea arose, and the pump-lines were carried away. Water rose in the *Pelican,* buckling the forward bulkhead, and the vessel was liable to burst at any moment, going down in a flash. Every man on her was in danger, and it was decided to leave aboard only a few men to do necessary work. Twelve volunteers were called for. Every member of her crew stepped forward. The dozen strongest were chosen and the others, against their will, were ordered off the ship.

Fifty miles of open sea were still to be traversed. Darkness had fallen. Crews of *Auk* and *Eider* struggled desperately to get the lines repaired and pumps going. Men stood by with axes to cut the mooring lines, in case the *Pelican* should sink. All through the night this struggle continued, and there was a sigh of relief when day dawned with the vessel still afloat, and the ships reached the shelter of Tresness Bay.

A curious accident befell the *Flamingo.* While weighing anchor, steel touched copper and exploded a mine which her anchor had fouled, damaging her rudder, bending her skeg, and dishing in her stern.

The most serious disaster encountered in all our mine sweeping occurred on July 12th, the sinking of the *Richard Bulkeley.* Caught in its kite, a mine was seen close to her stern, near the surface. To get it further away the kite wire was being veered when the mine exploded. The after part of the ship's hull was shattered. She sank in seven minutes.

Commander Frank R. King, who was in command of the division of trawlers as well as the *Bulkeley,* went down with the vessel. When the blast came, his first thought was the safety of his crew. Half stunned by the explosion, one man, whose life-preserver had been blown off, struggled to the deck. Commander King took off his own life-belt, buckled it around the sailor, and helped him get clear of the ship before she took her final plunge. Until the vessel disappeared he was still hunting for members of the crew who might be left aboard. When last seen, as the *Bulkeley* went lower into the water, he was on the bridge. He went down with his ship, a heroic figure, sacrificing his life to save his men. It was a solemn privilege to me, a few months later, to pay tribute to the memory of this gallant officer by naming one of our new destroyers in his honor.

Altogether, two officers and nine men were killed during these hazardous operations, and 23 ships were damaged. Regrettable as was this loss of life, it was small in comparison with that of our comrades in the British mine-sweeping service.

The mine field was removed, consisting of 50,000 mines, spread over an area of some 6,000 square miles of the stormy North Sea, and the entire barrage swept up by September 30th. On that day the hazard to shipping by this vast enterprise in the North Sea was removed.

When the Mine Force returned to the United States, it was given a welcome as genuine as that accorded our battleships when they returned from service abroad. As the vessels steamed up North River, November 24, 1919, they were reviewed by the Secretary of the Navy, distinguished officers and citizens on Admiral Strauss' flagship, the *Black Hawk.*

This marked the end of that enterprise which "shut up the hornets in their nests"—that bold adventure which was the greatest new naval offensive of the war.

CHAPTER XIII

PRESIDENT WILSON AS A STRATEGIST

SPEAKING TO OFFICERS OF THE FLEET AT YORKTOWN, HE ADVOCATED NEW AND BOLD METHODS—"WHY NOT SHUT UP THE HORNETS IN THEIR NESTS?"—"LEAVE OUT OF YOUR VOCABULARY THE WORD 'PRUDENT'; DO THE THING THAT IS AUDACIOUS TO THE UTMOST POINT OF RISK AND DARING."

THE world knows President Wilson as a scholar, teacher and historian; as executive and statesman. But it does not know him, as we did, as a master of military strategy.

His grasp of the whole situation, his clear conception of Army and Navy policies and operations, his rare judgment were demonstrated in important decisions, and his personal interest and influence had a marked effect on the conduct of the war.

Always interested in the Navy, he kept up with all that was being done and planned, and his suggestions and directions proved of the utmost value to officers and officials.

"We shall take leave to be strong upon the seas," he said not long after the beginning of the European war. In his address at St. Louis, early in 1916, he declared that ours should be "the most adequate navy in the world." At the next cabinet meeting a member expressed surprise at the President's advocacy of so vigorous a naval policy, and asked if he had been correctly quoted in the newspapers.

"Yes," replied the President, "and it is one thing I said in my swing around the circle that I absolutely believe."

He strongly urged the big construction program presented several months before, and exercised a potent influence in putting through Congress the "three year program" which authorized building 157 naval vessels.

Long before we entered the war, when the Allied navies

seemed impotent before the onslaughts of the submarines, President Wilson pointed to the vigorous policies which later proved so successful.

"Daniels, why don't the British convoy their merchant ships and thus protect them from submarines?" he asked me early in the war. As sinkings increased, he pointed out that their practice of sailing ships separately had proved a failure, and asked, "Why now, with their distressing experiences, do they hesitate about adopting the convoy system?"

He could not comprehend why the British, as soon as Germany declared war, had not mined the English Channel so that no submarine could pass through it. As a matter of fact, strange as it seems, the channel from Dover to Calais never was a complete barrier to submarines, though the Dover Patrol did brilliant service, and the United States Navy insisted that closing this channel was one of the first steps toward defeating the U-boats.

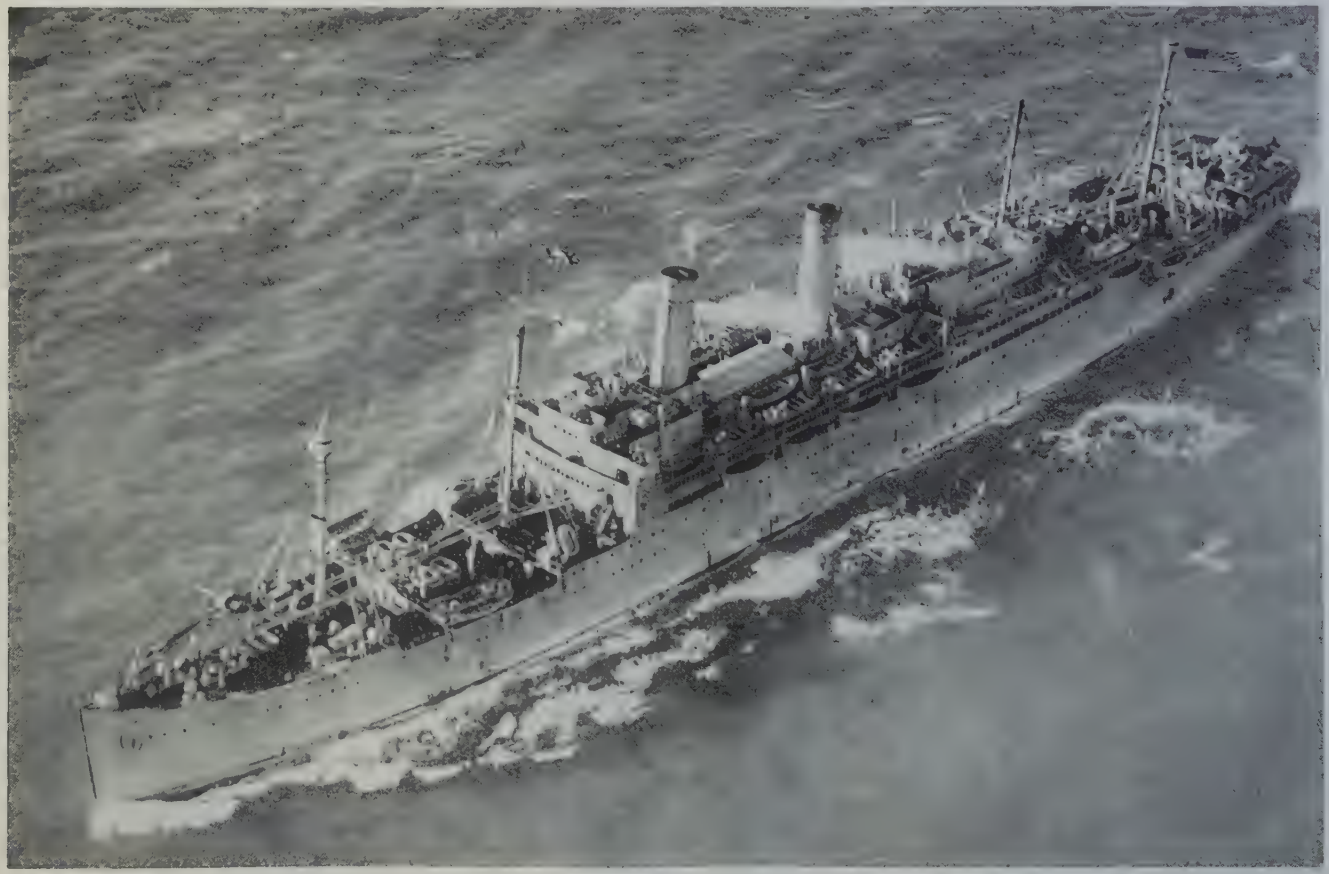
"Why don't the British shut up the hornets in their nests?" he asked me just before we entered the war, and after we were embarked upon it he declared that we must insist upon some plan that would prevent the egress of the U-boats from their bases. When our Bureau of Ordnance proposed, in April, 1917, the construction of a mine barrage across the North Sea, he was deeply interested in the plan and heartily approved it. That carried out the idea he believed the Allies should have put into effect earlier in the war. As that plan was debated and delayed, and characterized in London as "impracticable," he grew impatient of the long delay in adopting this or some other vigorous offensive against the submarines.

On July 4, 1917, he sent the following cablegram to London:

"Strictly confidential." From the President for Admiral Sims.

From the beginning of the war, I have been greatly surprised at the failure of the British Admiralty to use Great Britain's great naval superiority in an effective way. In the presence of the present submarine emergency they are helpless to the point of panic. Every plan we suggest they reject for some reason of prudence. In my view this is not a time for prudence but for boldness, even at the cost of great losses.

In most of your dispatches you have quite properly advised us of the sort of aid and coöperation desired from us by the Admiralty. The



THE TRANSPORT WHICH CARRIED PRESIDENT WILSON TO THE PEACE CONFERENCE

An aerial view of the George Washington. This ship carried to France more soldiers than any other transport except the Leviathan.

ALLIED NAVAL COUNCIL IN SESSION AT PARIS

Admiral Sims at the extreme left, Admiral Benson third from left end. In the center Sir Eric Geddes (bareheaded), First Lord of the Admiralty, and M. Legues, French Minister of Marine. At the left of M. Legues is Admiral Beatty, and back of him, to his right, Admiral Long.

trouble is that their plans and methods do not seem to us efficacious. I would be very much obliged to you if you would report to me, confidentially, of course, exactly what the Admiralty has been doing, and what they have accomplished, and, added to the report, your own comments and suggestions, based upon independent thought of the whole situation, without regard to the judgment of any one on that side of the water.

The Admiralty was very slow to adopt the protection of convoy and it is not now, I judge, protecting convoys on adequate scale within the danger zone, seeming to keep small craft with the Grand Fleet. The absence of craft for convoy is even more apparent on the French coast than on the English coast and in the Channel. I do not see how the necessary military supplies and supplies of food and fuel oil are to be delivered at British ports in any other way within the next few months than under adequate convoy. There will presently not be ships or tankers enough and our shipbuilding plans may not begin to yield important results in less than eighteen months.

I believe that you will keep these instructions absolutely and entirely to yourself, and that you will give me such advice as you would give if you were handling the situation yourself, and if you were running a Navy of your own.

WOODROW WILSON.

Admiral Sims made an extended and detailed reply to this cablegram, but it evidently did not satisfy the President, as was shown a month later, in his address to the Fleet.

That visit to the Fleet, August 11, 1917, was a notable occasion. It was the first time, I believe, that a President has, in the midst of war, gone to the chief naval rendezvous and gathered the officers about him for a heart-to-heart talk. Standing on the quarter deck of the *Pennsylvania,* surrounded by admirals, captains, commanders and other ranks, he could see all around him the dreadnaughts which are the embodiment of national strength and naval power. In the background was Yorktown, where Cornwallis' surrender marked the culminating victory of the Revolution. And in this historic spot American forces were again making history.

The President had slipped away so quietly from Washington that few knew he was gone. Not only the speech he made, but the very fact of his visit was long kept secret. But that address, informal and confidential as it was, deserves a place in naval history.

Disclaiming any idea that he had come "with malice prepense to make a speech," he told the officers that he had come to have a look at them and say some things that might be best said intimately and in confidence. "One of the deprivations which any man in authority experiences," he exclaimed, "is that he cannot come into constant and intimate touch with the men with whom he is associated and necessarily associated in action." "The whole circumstance of the modern time," is extraordinary, calling for extraordinary action, he pointed out and said:

Now, the point that is constantly in my mind, gentlemen, is this: This is an unprecedented war and, therefore, it is a war in one sense for amateurs. Nobody ever before conducted a war like this and therefore nobody can pretend to be a professional in a war like this. Here are two great navies, not to speak of the others associated with us, our own and the British, outnumbering by a very great margin the navy to which we are opposed and yet casting about for a way in which to use our superiority and our strength, because of the novelty of the instruments used, because of the unprecedented character of the war; because, as I said just now, nobody ever before fought a war like this, in the way that this is being fought at sea, or on land either, for that matter. The experienced soldier,—experienced in previous wars,—is a back number so far as his experience is concerned; not so far as his intelligence is concerned. His experience does not count, because he never fought a war as this is being fought, and therefore he is an amateur along with the rest of us. Now, somebody has got to think this war out. Somebody has got to think out the way not only to fight the submarine, but to do something different from what we are doing.

We are hunting hornets all over the farm and letting the nest alone. None of us knows how to go to the nest and crush it, and yet I despair of hunting for hornets all over the sea when I know where the nest is and know that the nest is breeding hornets as fast as I can find them. I am willing for my part, and I know you are willing, because I know the stuff you are made of—I am willing to sacrifice half the navy Great Britain and we together have to crush that nest, because if we crush it, the war is won. I have come here to say that I do not care where it comes from, I do not care whether it comes from the youngest officer or the oldest, but I want the officers of this Navy to have the distinction of saying how this war is going to be won.

The Secretary of the Navy and I have just been talking over plans for putting the planning machinery of the Navy at the disposal of the brains of the Navy and not stopping to ask what rank that brains has, because, as I have said before and want to repeat, so far as experience in this kind of war is concerned we are all of the same rank. I am not

saying that I do not expect the admirals to tell us what to do, but I am saying that I want the youngest and most modest youngster in the service to tell us what we ought to do if he knows what it is. Now I am willing to make any sacrifice for that. I mean any sacrifice of time or anything else. I am ready to put myself at the disposal of any officer in the Navy who thinks he knows how to run this war. I will not undertake to tell you whether he does or not, because I know I cannot, but I will undertake to put him in communication with those who can find out whether his idea will work or not. I have the authority to do that and I will do it with the greatest pleasure. The idea that is in my mind all the time is that we are comrades in this thing."

"I wish that I could think and had the brains to think in the terms of marine warfare," he remarked, "because I would feel then that I was figuring out the future history of the political freedom of mankind."

"We have got to throw tradition to the winds," he exclaimed, and went on to say:

Now, as I have said, gentlemen, I take it for granted that nothing that I say here will be repeated and therefore I am going to say this: Every time we have suggested anything to the British Admiralty the reply has come back that virtually amounted to this, that it had never been done that way, and I felt like saying, "Well, nothing was ever done so systematically as nothing is being done now." Therefore, I should like to see something unusual happen, something that was never done before; and inasmuch as the things that are being done to you were never done before, don't you think it is worth while to try something that was never done before against those who are doing them to you? There is no other way to win, and the whole principle of this war is the kind of thing that ought to hearten and stimulate America.

America has always boasted that she could find men to do anything. She is the prize amateur nation of the world. Germany is the prize professional nation of the world. Now, when it comes to doing new things and doing them well, I will back the amateur against the professional every time, because the professional does it out of the book and the amateur does it with his eyes open upon a new world and with a new set of circumstances. He knows so little about it that he is fool enough to try the right thing. The men that do not know the danger are the rashest men, and I have several times ventured to make this suggestion to the men about me in both arms of the service: Please leave out of your vocabulary altogether the word "prudent." Do not stop to think about what is prudent for a moment. Do the thing that is audacious to the utmost point of risk and daring, because that is exactly the thing that the other side does not understand, and you will

win by the audacity of method when you cannot win by circumspection and prudence.

I think that there are willing ears to hear this in the American Navy and the American Army, because that is the kind of folks we are. We get tired of the old ways and covet the new ones.

So, gentlemen, besides coming down here to give you my personal greeting and to say how absolutely I rely on you and believe in you, I have come down here to say also that I depend on you, depend on you for brains as well as training and courage and discipline. You are doing your job admirably, the job that you have been taught to do; now let us do something that we were never taught to do and do it just as well as we are doing the older and more habitual things, and do not let anybody ever put one thought of discouragement into your minds. I do not know what is the matter with the newspapers of the United States. I suppose they have to vary the tune from time to time just to relieve their minds, but every now and then a wave of the most absurd discouragement and pessimism goes through the country and we hear nothing except of the unusual advantages and equipment and sagacity and preparation and all the other wonderful things of the German Army and Navy. My comment is always the very familiar comment, "Rats!" They are working under infinite disadvantages. They not only have no more brains than we have, but they have a different and less serviceable kind of brains than we have, if we will use the brains we have got. I am not discouraged for a moment, particularly because we have not even begun and, without saying anything in disparagement of those with whom we are associated in the war, I do expect things to begin when we begin. If they do not, American history will have changed its course; the American Army and Navy will have changed their character. There will have to come a new tradition into a service which does not do new and audacious and successful things.

A short time after the President made this declaration on his flag-ship, Admiral Mayo was dispatched to Europe, where he pressed upon the British Admiralty the necessity of constructing the North Sea barrage. Finally in October, six months after the plan had been presented, this great project, in line with President Wilson's idea of bold and new things in naval warfare, was undertaken.

From many quarters tips came to the President of possible surprise action and not a few orders to Naval Intelligence to send out secret service men to run down a clue were the result of suggestions emanating from the President. Sometimes, unannounced and unheralded, during the war, he would drop in at the Navy Department, and quite as often at the War Depart-

ment, and he never came merely to visit, agreeable as social intercourse would have been. He had an idea every time, a practical suggestion, or a desire to be informed of progress in some particular undertaking which he was following with deep interest.

Sometimes when he dropped in unexpectedly to make a suggestion—(he had a habit of calling directions "suggestions" when speaking to a Cabinet member)—I sometimes wondered if he was not as much influenced in making his personal calls to give encouragement and support, and the helpful personal touch, as to discuss strategy or tactics or policy. Certainly these visits heartened and strengthened those of us who in trying times were charged with heavy responsibility. He knew, too, what was going on. He often surprised me by his knowledge of the comparative qualities of men he had never seen—how accurate was his appraisement, how his questioning of them showed the military leadership which few people thought the college professor possessed. He never left my office, and I never left the White House, after a conference during the war, without the reflection that the world had lost a great military leader when it gained a great educator and executive.

When we were transporting soldiers through the infested zones he was anxious, intensely interested, and read every cablegram concerning the troopships. When he did not come in person, in crucial days, there would come from the White House frequent memoranda written by himself on his little typewriter, asking for some information or making an illuminating suggestion, signed "W. W." Those "W. W." notes never had a spare word, and they showed the same clearness and vision which John Hay tells us Lincoln had when he would go over to see Stanton, or Gideon Welles in the dark days of Civil War.

There is a feeling among many military men that civilians "butt in" when they give their views on strategy. It is notorious how some of the generals in the War between the States resented the suggestions of Mr. Lincoln, suggestions which as a rule displayed sounder judgment of the way to win battles than the military experts had shown.

I recall one admiral during the war, who, upon receiving, through the diplomatic representatives of our Government,

President Wilson's strong opinion that a certain important offensive should be adopted, asked: "What does the President want to butt in for? What does he know about it?" As to that particular matter the President, from long study and reflection, found that it was necessary to "butt in," because some naval leaders of more than one nation lacked the vision to do the bold and the new thing to win.

President Wilson took no perfunctory interest in the Navy. In fact, he had the keenest naval instinct. People, you know, are born with a passion for some one thing, or in their youth it comes to them. When Thomas Woodrow Wilson was a boy—(he had not then dropped the Thomas)—he picked out for himself a naval career. What a jolly good captain he would have made of the *"Virginia"* or the *"New Jersey!"* Living as a boy on a river, he loved boating next to books, or even before books. He had a penchant for sailing and loved sea stories, and his ambition was to follow Jones and Farragut.

When the opportunity was within reach to go to the Naval Academy at Annapolis, his father, a scholarly Presbyterian preacher of the old school, who knew his son's real mission in life better than Thomas Woodrow, said, in substance, "No; you are not meant for the sea; letters, literature, books, statesmanship for you." I do not know whether the future President accepted the parental dictum with the nautically cheerful "Aye, aye, sir," but he accepted it, and the Navy lost an officer who would probably have destroyed many precedents and won many victories, when the father snatched him from the topsail and sent him down below to the drudgery of learning languages and political economy.

I do not know a civilian who employs more naval terms. The call to the sea is in his blood. His father kept him out of the Navy, but he could not keep the Navy out of him, or the Navy lore and lingo, any more than you can keep the Quaker out of a Quaker by turning him out of meeting. At sea President Wilson loved to wear whites or blues, as near regulation as a civilian can, to don a cap, to watch the heaving of the lead and the weighing of the anchor, and listen to the "shiver-my-timbers" talk that one overhears from the older sailors on duty.

CHAPTER XIV

COMRADES OF THE MIST

U. S. BATTLESHIPS WITH BRITISH GRAND FLEET—DREADNAUGHTS UNDER RODMAN FORMED SIXTH BATTLE SQUADRON—ASSIGNED POST OF HONOR—ATTACKED SIX TIMES BY SUBMARINES—U-BOAT RAMMED THE "NEW YORK," CAUGHT IN ITS PROPELLER—THREE BATTLESHIPS, UNDER RODGERS, AT BANTRY BAY—SURRENDER OF GERMAN FLEET.

THERE was a thrill through all the Grand Fleet, a storm of cheers sweeping from Admiral Beatty's flagship down to the last destroyer that December morning when the United States dreadnaughts, under Admiral Hugh Rodman, steamed around the headlands, up the curved channel, and down the long line of British battleships, dropping anchor among them.

Twelve days at sea, weathering a gale that raged for three days, they had had a hard voyage. Nearing the coast in the pitch-black darkness of a starless night, they had, a few hours before, been met by a division of destroyers which escorted them to port. The sun, which rises late in that northern clime, broke through the mist as they reached the entrance to the harbor. Seaplanes circled the vessels, and a kite balloon's heliograph flashed its welcome.

The *New York* led the way, Admiral Rodman and his staff on the bridge, while Admiral Beatty, commander-in-chief, surrounded by his crew, stood on the deck of the *Queen Elizabeth.* On all the ships the officers and crews, manning the rails, stood at attention.

The "Star Spangled Banner" came rolling from the British bands, and the American bands played "God Save the King." This was according to custom, but it was a real surprise to our sailors when there came from the British vessels an outburst

of cheers that ran clear down the line. That seemed like home to our boys, and they replied with Yankee yells until Scapa resounded with such a roar of sound as it never heard before.

"This is the most enthusiastic welcome an American squadron ever received anywhere," Admiral Rodman remarked. As soon as the ships anchored, Admiral Rodman made his official call on Admiral Beatty, on the *Queen Elizabeth.* As they exchanged greetings, Admiral Rodman said:

"We are here, and we put ourselves entirely at your command. We ask no favors or privileges. We only want to be one of you. In a sense we feel that we are no longer merely the American Navy. We are now rather an integral part of your fleet for the purpose of unified prosecution of our great common aim. We have not come merely to take part in the spectacular side of your work. We want to do our fair share of everything, duties pleasant and unpleasant alike. We do not come to be your guests but to be co-workers. We do not want to be entertained; we want to work." That was characteristic of Rodman, who was selected to command our greatest ships overseas because of his outstanding ability as a great officer.

"Today marks an epoch in the history of England and America," said Admiral Beatty, expressing the pleasure with which he had looked forward to the coming.

There was sealed the firm friendship of those "Comrades of the Mist," the British and American dreadnaughts in that Grand Fleet, which formed the greatest aggregation of naval power the world ever saw, and whose very existence kept the German High Seas Fleet contained in its home ports, never again to venture out until it slunk to Scapa Flow in surrender.

The American dreadnaughts which served with the Grand Fleet were the *New York* (flagship), Captain C. F. Hughes, afterwards commanded by Captain E. L. Beach; the *Texas,* Captain Victor Blue; the *Wyoming,* Captain H. A. Wiley, afterward Captain H. H. Christy; the *Arkansas,* Captain W. H. G. Bullard, afterward Captain L. R. de Steiguer; the *Florida,* Captain Thomas Washington, afterward Captain M. M. Taylor; and the *Delaware,* Captain A. H. Scales.

"It is a matter of pride," said Admiral Rodman, "that we were at once able to coördinate and coöperate with the British

intelligently, without the slightest hesitancy, friction or misunderstanding. We adopted and could use their signals, radio, secret codes and other communication—and that is one of the hardest problems we have in the Navy—and could efficiently execute their tactics and maneuvers and conform to their war plans. This was put to the test when within three days after our arrival a signal was made for all ships to be ready to proceed to sea for active service and we reported ready when the time came.

"From that day to the end of the war we took part in every major operation in the North Sea, and some independent smaller ones. There was never a time but that we were ready when called upon. We could always steam full speed, maintain our position, and we received nothing but the highest praise not only from the British admirals, officers and men, but from those of our own navy who visited us.

"Let me truthfully add, without taking the slightest credit to myself as the commanding officer, but giving it to the officers and men, where it belongs, and to the years of preparedness in the American Navy, that, put it as modestly as I can, the American Squadron was fully equal to any of the Grand Fleet."

Our ships were, in fact, in such a high state of efficiency that the British Admiralty made specific inquiries as to our methods with a view to adopting them for their own ships.

Soon after joining the Grand Fleet, the American dreadnaughts were designated as the Sixth Battle Squadron, and assigned to one of the two places of honor and importance in the battle line—one of the two "fast wings" which would take station at the head or rear of the battleship force when going into action. On one occasion, when the Grand Fleet came within a few miles of the German fleet, the American division was in the van, and would have led the action, but the Germans, as usual, took refuge behind their defenses before the British and Americans could run them down and force an engagement.

Describing the activities of the Grand Fleet and of our battleships, Admiral Rodman said:

> It was our policy to go after the enemy every time he showed his nose outside of his ports; no matter when or where, whether in single ships, by divisions, or his whole fleet, out we went, day or night, rain

or shine (and there was mighty little daylight and much less shine in the winter months), blow high, or blow low, and chase him back in his hole. So persistent was this performance on our part, so sure were we to get after him, that, toward the end he rarely ventured more than a few miles from his base; and immediately we would start after him, back he would go in his hole, and haul his hole in after him.

Every inducement was offered him to come out. Inferior forces were sent down into the Heligoland Bight to induce him to attack; valuable convoys were dispatched, apparently without protection, and other devices to tempt him out; but he would not come. It is needless to add that such expeditions, on every occasion, were well guarded, and we were ready to pounce on him with unseen forces had he attempted to take advantage of the seeming small force or unprotected vessels.

In our operations in the North Sea we were frequently attacked by submarines, and our battleships had numerous narrow escapes, often only by prompt and skilful handling. On one occasion a submarine rammed the flagship *New York,* dented the bottom, and demolished the starboard propeller. But there is every reason to believe that the blows from the propeller sank the submarine. En route to drydock to make repairs and install a new propeller, three torpedoes in rapid succession were fired at her by hostile submarines. But again she avoided them by clever maneuvering and escaped. Once when guarding or supporting a convoy of thirty or forty vessels, on the coast of Norway, in mid-winter, a bunch of hostile " subs " fired six torpedoes at us. Again only our vigilance and instantaneous maneuvering saved us, but by a very narrow margin. There were still other attacks by submarines which necessitated quick action to avoid them.

Our dreadnaughts were attacked six times by submarines. On February 8, 1918, the *Florida* and *Delaware* were off the Norwegian coast, waiting for a return convoy, when a submarine was sighted. The U-boat promptly attacked, firing a salvo of torpedoes. Four were aimed at the *Florida,* two at the *Delaware.* Quick action was required to avoid the deadly cylinders. Both vessels turned instantly, swerving so rapidly that the torpedoes swept harmlessly past, neither vessel being hit. Destroyers dashed at the enemy, dropping numerous depth-bombs, but the U-boat, which had submerged instantly, apparently left the scene undamaged.

The *Texas* had an encounter with a submarine on April 27th. At 12:47 p. m. in latitude 56°-56′ north, longitude 0°-40′ west, a periscope was sighted. The *Texas* at once brought her guns to bear, firing at the moving feather. The " sub " submerged,

leaving only its tell-tale wake. Two destroyers which were near-by went to the scene and dropped depth-bombs in the vicinity where the U-boat went down, but it had disappeared.

The *New York, Texas, Delaware, Florida* and *Wyoming* were twice attacked on June 30th. The division was steaming in line abreast, in open order, when a periscope was reported by the *Wyoming,* and was also seen by the destroyer *Parker.* The *Delaware, Florida* and *Wyoming* opened fire, their shells falling around the spot where the " scope " was sighted. The " sub " had immediately submerged, and the destroyers *Salmon, Parker,* and *Radstock* dashed down the wake, dropping depth-bombs. The battleships moving on, leaving the *Radstock* to search the vicinity. An hour later, in latitude 58°-44′ north, longitude 2°-34′ east, the second attack occurred, the *Delaware* opening fire on a submarine reported astern. The escorting destroyers did not see the periscope, but three of them scouted down the lines and dropped ten depth-bombs.

At 9 p. m., on July 28th, while cruising in latitude 57°-55′ north, longitude 0°-05′ east, the *Arkansas* sighted a periscope. Opening fire with her port sky gun, she went to emergency full speed using her rudder to bring the object fired at ahead. At this moment the wake of a torpedo running toward the ship was sighted. Swinging to the left, the torpedo was avoided, and the battleship escaped unscathed.

The occasion to which Admiral Rodman referred, when his flagship was rammed by a submarine, occurred when the *New York* was leading the division into Pentland Firth. While turning with right rudder, her stern swinging to port, a heavy underwater blow was felt on her starboard quarter, followed immediately by another, which damaged the ship's starboard propeller, breaking off two of its blades. The water was deep, the channel clear of obstructions. No ordinary force could have delivered a blow powerful enough to smash propeller blades and dent the big ship's bottom. After weighing all the evidence, and examining the vessel's hull when she was docked, the court of inquiry verified the conclusion of Admiral Rodman, that the *New York* had struck a submarine. While there were various theories, the one which seemed most tenable was that, in attempting to dive under the vessel, to get in position to attack,

the U-boat had struck the *New York's* propellers and been smashed as the battleship turned.

The *New York* was attacked again on October 16th, at Rosyth, while en route from a northern base. At one o'clock in the morning, three torpedoes were fired, all passing ahead of her. Owing to a damaged propeller, the ship was making only twelve knots. Ordinarily, she would have been going at the rate of sixteen knots or more. The submarine apparently misjudged her speed, aiming its torpedoes too far ahead. A submarine was sighted and reported by a patrol in the vicinity, and it is believed this was the same one which attacked the *New York.*

There was joy among the Americans on April 24, 1918, when they sailed with the Grand Fleet "for active service against the enemy." A large German force was reported operating in the North Sea, probably planning to attack the Norwegian convoys. Hoping for action, the British and American vessels found the Germans had turned back to their home bases. They had missed the enemy by only four hours. A British flagship had been attacked by a submarine, two torpedoes being fired at her. Destroyers had dropped quantities of depth-charges. Some floating mines had been destroyed by gunfire. But they had missed the big game they were seeking.

It was not until the evening of October 12th that any considerable German force was reported. Three large enemy men-of-war were said to have been sighted, steering northwest in the direction of a convoy off the Scotch coast. The American dreadnaughts, a battle-cruiser squadron and light cruisers, screened by destroyers, sailed soon after midnight. They were directed to take position to the north and west of the Orkneys, and to patrol the passage between the Orkney and Shetland islands, in the hope of intercepting the Germans. But the German ships must have again turned back, for, though that whole region was scouted, there was no sign of an enemy vessel. This was only another of the many disappointments in the constant effort to engage the German capital ships.

In that rigorous climate, a latitude as far north as Alaska or Petrograd, snow and ice are continuous through most of the year. Cold and sleet and heavy seas made navigation arduous

and dangerous. There was continuous cruising in close formation, without lights, at high speeds, on winter nights when the darkness lasted for eighteen hours. The mine-fields, our own as well as those of the enemy, were an ever-present danger, and battleships had to be always on the alert to repel attacks by submarines.

The whole fleet had to be ready to put to sea on almost instant notice. Officers and men had hardly any liberty or leave. No one was allowed away from the ships after dark, nor for a period longer than four hours, and then only in the immediate vicinity of the ship, in signal or telephone communication, subject to recall. All ships were completely closed and darkened from sunset to sunrise, as a precaution against air and other attacks. In winter this meant from fifteen to eighteen hours per day.

Some idea of the immense size of the Grand Fleet may be gained from the statement that, entering or leaving port, the column of ships, excluding destroyers, averaged 65 miles long. On one occasion, it was 76 miles.

Hard duty as it was for the officers in that wintry clime, it was even harder for the enlisted men. Yet our boys bore it with the cheerfulness that distinguishes the American sailor, who, when hardship comes, "bears it with a grin,"—not only bears it, but laughs about it. For a year, every officer and man in the Grand Fleet had been waiting and hoping for a chance to get at the Germans. And, at last, when that fleet surrendered without striking a blow, their disappointment was too deep for words.

That scene has been graphically described, the feeling of officers and men so well expressed by Admiral Rodman, that I give in his own words his account of the German surrender:

> After four years of war for the Grand Fleet, and after we have been a part of it for the last year, there came the debacle, the last scene of the great drama. Not as we had all expected, as the successful termination of a great sea battle, but as an ignominious surrender without firing a gun. Surely, no more complete victory was ever won, nor a more disgraceful and humiliating end could have come to a powerful and much vaunted fleet than that which came to the German High Seas Fleet. Let me try to describe it.
>
> The Commander-in-Chief of the Grand Fleet demanded and received

what actually amounted to an unconditional surrender of the whole German Navy. Under his orders the enemy's ships were disarmed, ammunition landed, torpedo warheads sent ashore, breech-blocks and fire-control instruments removed, and every offensive utility rendered innocuous. Then, with reduced crews, under the command of a German admiral, in one lone column, the heavy battleships leading, the Hun fleet sailed for a designated rendezvous, to arrive at a specified time, just outside of the Firth of Forth in Scotland, where the Grand Fleet lay at anchor.

Before daylight the Grand Fleet was under way and proceeded to sea, heading east, in two long columns, six miles apart, our American battleship force being in the middle of the northern line. A light British cruiser was directed to meet the Germans, who were heading west, and conduct them in between our two columns.

Let me diverge for a moment and recall to any one who has been in China or the Philippines the viciousness of and antipathy which the domesticated carabao has for a white man. How ready they are to attack, while any native child can, with perfect safety and impunity, go up to the most savage of them, take him by the nose, and lead him where he pleases. I was reminded of this when a little British cruiser rounded to ahead of the much-vaunted German High Seas Fleet, and hoisted the signal, "Follow me," and led them down between our columns, where our battle flags were mast-headed, turrets trained toward the enemy, crews at battle stations, and all in readiness for any act of treachery that might be attempted.

At a prearranged signal our forces swung symmetrically through 180 degrees, and, still paralleling the enveloped Germans, conducted them into a designated anchorage in the entrance of the Firth of Forth. Then came a signal from the Commander-in-Chief to the surrendered fleet: "At sundown lower your colors and do not hoist them again without permission." Surely no greater humiliation could have befallen them after their frequent and taunting boasts and threats.

There is little else to be told. After an inspection by British and American officers to gain assurance that the ships were disarmed, they were sent in groups, under guard, to Scapa Flow, in the cold, dreary, bleak, God-forsaken harbor in the Orkneys where the Grand Fleet had spent many a dreary month and year, waiting like ferocious dogs in leash, watching and waiting, to pounce on the German Fleet, should the opportunity ever occur. Here the Germans lay at anchor in long, symmetrical lines, helpless, innocuous, harmless; their sting and bite removed, their national colors lowered for good and all as a token of submission to the masters. They were corralled like wild and cruel beasts that had been hobbled, guarded by a single division of battleships.

Our mission had been successfully accomplished; the German fleet is a thing of the past; the seas are safe and free to our own and our Allies' ships. The value of sea power could have no better demonstration.

The British and Americans who served together at Scapa Flow and in the North Sea were bound together by the strongest ties. Admiral Rodman and all our officers and men felt they were serving with brothers, and our British allies felt the same way toward our own forces.

On their departure, Admiral Sir David Beatty, the British commander-in-chief, in an address on board the flagship *New York,* paid this high tribute to the officers and men of the American battleships which served with the Grand Fleet:

There is not much that I have to say, but what I do say I hope you will understand comes from the heart, not only my heart, but the hearts of your comrades of the Grand Fleet.

I want, first of all, to thank you, Admiral Rodman, the captains, officers, and the ships' companies of the magnificent squadron, for the wonderful coöperation and the loyalty you have given to me and to my admirals; and the assistance that you have given us in every duty you had to undertake. The support which you have shown is that of true comradeship; and in time of stress, that is worth a very great deal. As somebody said the other day, "The fighting is now over, the talking is now going to begin;" therefore, I do not want to keep you here any longer, but I want to congratulate you for having been present upon a day which is unsurpassed in the naval annals of the world.

I know quite well that you, as well as all of your British comrades, were bitterly disappointed at not being able to give effect to that efficiency that you have so well maintained. It was a most disappointing day. It was a pitiful day to see those great ships coming in like sheep being herded by dogs to their fold, without an effort on anybody's part; but it was a day that everybody could be proud of. I have received messages from several people, offering sympathy to the Grand Fleet, and my answer was that we do not want sympathy; we want recognition of the fact that the prestige of the Grand Fleet stood so high it was sufficient to cause the enemy to surrender without striking a blow.

I had always certain misgivings, and when the Sixth Battle Squadron became a part of the Grand Fleet those misgivings were doubly strengthened, and I knew then that they would throw up their hands. Apparently the Sixth Battle Squadron was the straw that broke the camel's back. However, the disappointment that the Grand Fleet was not able to strike their blow for the freedom of the world is counteracted by the fact that it was their prestige alone that brought about this achievement.

I thank you again and again, for the great part the Sixth Battle Squadron played in bringing about the greatest naval victory in history. I hope you will give this message to your comrades: "Come back soon. Good-bye and good luck!"

Suppose German battle-cruisers should evade the vigilance of Allied capital ships and escape from the North Sea and suddenly attack troop carrying transports! That suggestion phrased in some such terms was the thought uppermost in the mind of every naval official when troops began to go over in 1918 by the hundreds of thousands each month. They recalled the damage inflicted by German raiders in the early days of the war. To be ready for such daring incursion a division of dreadnaughts was sent over, supplemented by submarines. They were kept in readiness to put to sea, and also at times escorted convoys in the Channel when submarines were reported in that vicinity. This division was commanded by Admiral Thomas S. Rodgers, and was composed of the *Utah* (Captain F. B. Bassett); the *Nevada* (Captain W. C. Cole); and the *Oklahoma* (Captain C. B. McVay). They had their base on Bantry Bay, Ireland, ready to oppose any German cruisers which might threaten shipping in the waters to the south of Ireland and England or on the routes to the ports of Northern France.

Though the German press, sorely disappointed at the failure of U-boats to sink transports, demanded that raiders dare every risk and sink troop-ships, they never ventured away from the protection of home ports. But the dreadnaughts of Admiral Rodgers kept eyes open and steam up ready, if they should make the attempt. Like Rodman's squadron, they did faithful work and deserve to share the commendation accorded to American dreadnaughts engaged overseas.

Three-fourths of our first line dreadnaughts saw service in European waters. All the rest, first and second line, would have been taken over by Admiral Mayo if their presence had been required.

FIFTH BATTLE SQUADRON JOINING THE BRITISH GRAND FLEET

Led by Admiral Rodman's flagship, the U. S. S. New York, the American ships steamed into Scapa Flow amid an outburst of cheers from their British comrades. Inset: Admiral Hugh Rodman.

From the painting by Bernard F. Gribble

SURRENDER OF THE GERMAN HIGH SEAS FLEET

Admirals Rodman and Sims, on the deck of the New York, watching the procession of German ships on their last voyage, to their anchorage in the Firth of Forth. Then came the signal from the Commander-in-Chief: "At sundown lower your colors and do not hoist them again without permission."

CHAPTER XV

"CINDERELLAS OF THE FLEET"

SUBMARINE CHASERS BORE BRILLIANT PART IN ATTACK ON DURAZZO—SANK ONE SUBMARINE, DAMAGED ANOTHER, AND "THOROUGHLY ENJOYED THEMSELVES"—QUEER CODES FOOLED THE GERMANS—OVER FOUR HUNDRED "CHASERS" BUILT—STAUNCH LITTLE WOODEN CRAFT DID WONDERFULLY GOOD WORK IN EUROPE AND AMERICA.

CINDERELLA was not the guest first invited, but when she arrived she became the belle of the ball. The little submarine chasers, originally designed to protect entrance to harbors, to patrol coasts and keep close to shore, won fame and admiration by their splendid service in Europe and America. These "Cinderellas of the Fleet" became eyes and ears of the anti-submarine forces, hunters rightly feared by the U-boats, whose commanders had at first looked upon them with ill-concealed contempt.

Sub-chasers were particularly valuable as "listeners," the submarine detection devices with which they were equipped being vastly superior to those previously in use. Organized in "hunting units"—three to the unit, the commander in the center, with a "wing boat" on either side—they were real "chasers" of submarines.

I am most grateful for the valuable service rendered by twelve submarine chasers under Captain Nelson, U. S. N., and Lieutenant Commander Bastedo, U. S. N., which I took the liberty of employing in an operation against Durazzo on October 2. They screened heavy ships during the bombardment under enemy fire; also apparently destroyed definitely one submarine which torpedoed *H. M. S. Weymouth,* and damaged and probably destroyed another submarine.

During the return voyage they assisted in screening *H. M. S. Weymouth,* and in escorting enemy hospital ship which was being brought in for examination. Their conduct throughout was beyond praise. They all returned safely without casualties. They thoroughly enjoyed themselves.

That was the message sent by the British Force Commander regarding the attack on the Austrian naval base by British, Italian and American vessels October 2, 1918. And the Italians expressed their appreciation in this dispatch from Rome:

Italian Naval General Staff expresses highest appreciation of useful and efficient work performed by United States chasers in protecting major naval vessels during action against Durazzo; also vivid admiration of their brilliant and clever operations which resulted in sinking two enemy submarines.

The exploits of our submarine chasers formed a notable feature of that brilliant and successful attack. When, on Saturday, September 28, the British commodore asked Captain Charles P. Nelson, in command at Corfu, if he could have twelve chasers, with four days' supplies, ready to leave in twenty-four hours, for "special service," Nelson's reply was one word: "Yes."

Sailing Sunday evening, the next morning they reached Brindisi, where the Allied forces were assembled for the attack, and received their instructions. It was 1:30 a. m., on October 2nd, that the four units, under command of Captain Nelson, got under way for the expedition. The chasers and their commanders were:

Unit B—Lieutenant Commander Paul H. Bastedo, commanding on S. C. 215, Lieutenant (junior grade) Wildon A. Ott; S. C. 128, Ensign Hilary R. Chambers, Jr.; S. C. 129, Ensign Maclear Jacoby.

Unit D—S. C. 225, Lieutenant (junior grade) Elmer J. McCluen; S. C. 327, Ensign Walter P. Grossmann.

Unit G—In command, Captain Nelson, on board S. C. 95; S. C. 95, Ensign George J. Leovy; S. C. 179, Ensign Erskine Hazard; S. C. 338, Ensign John M. Beverly.

Unit H—S. C. 130, Ensign Henry R. Dann; S. C. 324, Lieutenant (junior grade) Clifford W. Eshom; S. C. 337, Ensign Andrew J. Kelley.

At 8:40 they arrived off Durazzo, and stood by six miles from shore to await the arrival of the bombarding force. Its smoke could be seen on the horizon, and as the Italian vessels hove in sight, the sub-chasers moved to their stations.

Moving along on the flanks of the bombing squadrons, the chasers acted as a screen for the larger vessels, which poured out a rain of shells upon the Austrian defenses. Guarding the

British Light-Cruiser Force, the three boats of Unit B had to run in close to shore, only 800 yards from the enemy batteries. They had a lively experience for fifteen or twenty minutes, shells falling around them. But, going at full speed and "zigzagging to beat the band," as the sailors say, they managed to escape unscathed.

Suddenly came the cry, "Submarine!" Sub-chaser 129 had sighted the moving feather of a U-boat about 1,600 yards off her port quarter. Signaling to S. C. 215, S. C. 129 altered her course to the left to deliver an attack at right angles. The U-boat was heading south, apparently getting in position to attack the bombarding forces. In a moment a second feather was sighted a little farther to westward. As S. C. 129 reached the supposed path of the undersea boat, a depth-bomb was dropped. When it exploded, the enemy submerged for almost a minute, and then reappeared, showing both periscopes. S. C. 129 immediately began laying a pattern of depth-charges ahead of the U-boat and at right angles to his course.

When the seventh bomb exploded, in the water thrown up objects resembling pieces of metal appeared, and there was another explosion, seemingly in the submarine. The chaser crew was confident that submarine was destroyed.

Sub-chaser 215, sighting another periscope 750 yards away, opened fire with her three-inch gun and port machine-gun, hoisting signal to form for attack. The second three-inch shot dropped within two feet of the periscope, the commanding officer reported, and shattered it, a column of water six feet high rising into the air. The U-boat seemed to be turning sharply to starboard in the direction of the British light cruisers, which were then entering their bombarding sector. S. C. 215 and S. C. 128 closed in on the submarine and laid a pattern of depth-charges. As the fourth charge exploded, the executive officer of S. C. 215 sang out, "That got him!" He had seen what appeared to be a ship's plate and debris rise to the surface and then disappear. Heavy oil rose, covering the water in the vicinity, and the chaser crews concluded the U-boat had been sunk.

S. C. 215 and S. C. 128 then turned and headed for S. C. 129, which had first reported sighting a "sub," but which was lying to, repairing her engines. The unit stood over to capture the

Austrian hospital ship, hoisting the international flag, "Stop instantly!" The British cruisers *Nereide* and *Ruby* were, at the time, astern of the Austrian vessel, and the *Nereide* signalled that she would stop and take off the armed guard crew if the chasers wished to take over the hospital ship. The chasers, which were north of the Austrian port, replied that they would take her over when clear of Durazzo.

The little American craft took charge of the big Austrian vessel, the British cruisers *Tribune* and *Shark* signaling, "Go to Brindisi." Reaching Brindisi, they released the hospital ship, which had been taken to port for investigation. Then, with a sense of duty well done, the chasers dropped anchor in the harbor, and "called it a day."

While Unit B enjoyed the most exciting experience, all the other units were busy doing their full share of the work, escorting the bombing vessels and playing their part in the bombardment. When the British cruiser *Weymouth* was torpedoed, Units D, C, and H went to her assistance, and aided in warding off further attack. Though damaged, the cruiser was safely navigated to port. The boats of Unit D got close enough to fire at the houses on Cape Laghi.

The attack on Durazzo was a decided success. The city was practically put out of business as a naval base, and was of little further use to the Austrians who, defeated on land and sea, soon sued for peace.

The United States naval base at Corfu, where thirty-six of our sub-chasers were stationed, was established May 24, 1918, by Captain R. H. Leigh, Commander of Submarine Chasers for Distant Service. The primary duty of our forces there was to patrol the Straits of Otranto, the entrance to the Adriatic. That narrow stretch of water, forty miles wide, from Corfu to the "heel" of Italy, was the only route by which Austrian and German vessels from Trieste, Fiume, Pola, and Durazzo could make their way into the Mediterranean.

There was established the Otranto Mobile Barrage, which, though comprising mines and nets, depended mainly for its effectiveness on patrol vessels. There were three lines of these, at some distance apart, two of British vessels, destroyers and trawlers, and the third, ten miles below, of our submarine

chasers, twelve of which patrolled this line day and night. While this barrage was by no means "air-tight," and occasionally U-boats slipped through, it proved very useful and after its establishment there was a material decrease in submarine activity in that whole region. After the armistice an Austrian officer said that six U-boats were lost in that area.

Four hundred and forty sub-chasers were built, 340 manned by the United States Navy, and 100 by the French. They operated in the Atlantic, Pacific and Arctic Oceans, in the North Sea, in the Adriatic, the Ionian and Ægean Seas, and the Sea of Marmora. After the armistice, special duties carried them to Russia, Norway, Sweden, Denmark, to Austria, Dalmatia, Greece, and Turkey, and parts of Asia Minor.

"How are you going to get them across the Atlantic?" foreign naval attachés asked, when we were turning out chasers by scores. That was a problem, sending small boats over 3,000 miles of ocean in wintry weather. Pluck, daring, endurance and good navigation were required, but the problem was solved with surprising success.

Crossing the Atlantic and going through the Mediterranean to the Adriatic under their own power, they weathered storms that distressed many a big steamship. But these little 110-footers had some thrilling experiences. Disabled in a terrific gale Sub-chaser 28, manned by the French, seemed doomed. The other chasers pulled through, but this one was missing, and after days was given up as lost. A month later we were surprised and delighted when the news came that it had reached the Azores. How did that little boat, disabled and alone, manage to make its way 700 miles to port?

It was a thrilling story Alexis Puluhen and his men had to tell. Storm tossed, their engines broke down and the boat began leaking. Salvoes were fired and distress signals hoisted, but no relief came. Lubricating oil was exhausted, and all the salad oil and butter aboard were used in an effort to start up the engines. All motive power gone, table-cloths, sheets, bed-spreads and blankets were rigged up as sails. Rationing the crew to the smallest amount of food that could sustain them, doling out the drinking water, the little boat headed east. With a favoring breeze, she could sail about four knots an hour.

For a month the sub-chaser kept plodding along, laying its course for the Azores. Occasionally a steamer would be sighted far away—four in all were seen—but only one came close enough to see or hear the S. C. 28, and when seven guns, the distress signal, were fired, that vessel ran away. At last, after a struggle of thirty-three days, Puluhen sighted land. It was Fayal, one of the Azores. He hoisted the signal "YP"—"I need a tug"—and not long afterward a tug steamed out, and towed him into Horta. The sub-chaser was repaired, continued across the Atlantic, and took its place with the other American-built chasers which served on the French coast.

Three days at sea and three days in port, many chasers steamed an average of a thousand miles a month. "You people on yachts and cruisers don't know what it is to live in a sub-chaser," one seaman remarked. "Tossed about on ocean swells, swept by seas, with decks leaking and things below wet; gas fumes from the engines filling the interior, sometimes half the crew were seasick. The destroyers, I know, were no pleasure palaces, and they had no easy time, but none of you had a harder job than we fellows on the 110-footers." But they took things as they came, with unfailing cheerfulness and good humor.

Some of the sub-chaser squadrons developed codes of their own and got a lot of fun out of them. "Quack! Quack! Quack!" was one sub-chaser signal. The first time that queer call was heard over the wireless telephone in European waters it mystified our English friends quite as much as it did the Germans. And when the call was answered by an outbreak of strange words and phrases, listeners at the radio phones in all that area were plainly puzzled.

"Quack! Red-white-blue," they could understand, though what it might mean they could not conceive. But when it came to "Quack! High-low-jack," the thing was beyond all reason.

This was something new, probably a German trick. The British naval officers were concerned about it, and were decidedly relieved when they found it was no enemy concoction but came from the American sub-chasers which had lately arrived from across the Atlantic. They wanted to know what kind of a "quack" game the Americans were playing. And they were vastly amused when told that it was a new code they had de-

vised that could be easily remembered by officers and men, but could not be deciphered by the Germans.

The commander of one group named his boats in jingles or phrases. Three boats, as I have stated, constituted a submarine hunting unit. One set he designated as "red-white-blue," another as "corn-meal-mush," and a third as "high-low-jack." "Quack! Quack! Quack!" meant "operate at once."

The men were fond of making parodies on "Mother Goose" and other familiar rhymes, applicable to their job of hunting the U-boats. One of these, paraphrasing "The Spider and the Fly," went this way:

"Won't you come into my area?" said the chaser to the "sub";
"I'll treat you just as kindly as I would a tiger cub;
"I will listen to your motors, I will catch you without fail,
"And then I promise I will put some salt upon your tail."

What do you suppose the Germans thought of all this queer stuff that was coming over the radiophone? I should have liked to have seen the U-boat captains under water, and code experts in Berlin searching the books and racking their brains to find out its meaning, for no boats or calls or orders were ever phrased in such language before.

The sub-chasers put the Navy flag signals into words instead of letters. "Able-Boy!" was the code to "Take hunt formation; distance 500 yards." They had a word for every letter in the alphabet: Able, boy, cast, dog, easy, fox, George, have, item, jig, king, love, Mike, Nan, oboe, pup, quack, rot, sail, tare, unit, vice, watch, X-ray, yoke, zed.

Almost any necessary order or information could be transmitted by radiophone by means of this code. Here is a typical instance of how it worked when a submarine was heard:

Listener of Boat No. 1 reports: "Submarine, 90 degrees."
Executive officer: "Submarine, 123 degrees."
Executive reports: "2 (number of wing-boat) turbine 112 degrees."
Executive reports: "3 (number of other wing-boat) submarine 130 degrees."
Captain orders: "Course 123 degrees."
Executive to Radio: "Fox-unit; dog-easy-cast!"
Executive to Listener: "Up tube."

At the order "Up tube," the listening tube was raised from its position beneath the vessel; the signal-boy beside the mast hoisted the cone, the position of which showed the other boats what the engine of this sub-chaser was doing; the steersman put the wheel over, and the vessel headed for the estimated locality of the U-boat. All this was done in a moment or two.

If the submarine was not located, the captain ordered "Stop!" the executive called, "Down tube!" The tube, which extends through the bottom of the chaser, was lowered, and the listener strove again to hear any sound of the U-boat.

When the success of our detection devices had been demonstrated, it was decided that sub-chasers were well adapted to this duty, and were to be used mainly for this purpose. On May 12, 1918, six arrived at Portsmouth, England, and with the destroyer *Aylwin* began training tests with British submarines, south of the Isle of Wight. Eighteen chasers soon after reached Plymouth, and this under command of Captain Lyman A. Cotten was made the chief base, having eventually a force of 66 vessels. On August 20th, 30 of these chasers were ordered to Queenstown, where a base had been established under command of Captain A. J. Hepburn.

The Plymouth sub-chasers were in an area of considerable submarine activity, and reported a number of contacts. The S. C. 84, 85 and 86, Ensigns E. F. Williams, A. B. Baker and G. H. Lane, respectively, were credited with attacking and damaging a U-boat on July 10th. Nine chasers, Units 6, 2, and 10, were on hunt off the English coast on September 6th, when the listeners heard a submarine. Unit 2 attacked, dropped depth-charges, but its flagship was damaged by an explosion, and Unit 6 took up the pursuit. Located again, the U-boat went down, and the chasers bombarded her with depth-charges. Her machinery was evidently badly damaged. Listeners could hear the crew at work on the motors which would at times turn a few revolutions; but at last they stopped dead. The U-boat was unable to move. The chasers dropped over the spot all the depth-bombs they had, and at 6:15 two boats were sent to Penzance to get a fresh supply.

A water buoy, with 50-fathom wire cable, was dropped near the spot, lanterns were hung on it; and the chasers got into

AMERICAN SUB-CHASERS AT CORFU, GREECE

Eleven of these boats took part in the attack on Durazzo, the Austrian naval base in the Adriatic.

A FLOCK OF SUB-CHASERS WITH THEIR MOTHER SHIP

The *U. S. S. Melville* with sub-chasers at Queenstown.

position for the night. At times the listeners reported that the U-boat crew made attempts to start their motors. The next morning a few faint sounds were heard, and at last there came a noise of firing as if from revolvers or rifles, first three, then 22 shots. After this, nothing was heard, though the chasers remained on the scene all afternoon. They had been there thirty hours from the time the attack began. The chaser crews firmly believed that the U-boat's crew perished in their steel tomb, which sank to the bottom, never to rise again.

The best evidence of the good work done by our vessels at Plymouth is the fact, shown by official records, that from June 30th to the end of August, during which time our sub-chasers were covering the area between Start Point and Lizard Head, not a single Allied or merchant ship was attacked nor were any mines laid by the U-boats. This was in a section where some months before sinkings were of almost daily occurrence. After August, when many of our boats were withdrawn for duty farther to the westward, several ships were attacked and sunk, and mine-laying, though on a small scale, was resumed. This is regarded as conclusive proof that it was our little sub-chasers which made that area safe for Allied shipping in that important period.

While at Gibraltar, on their way to Corfu, the thirty chasers under command of Captain Nelson engaged in several hunts, on May 17, 1918, locating and chasing a U-boat to a point 12 miles northeast of Gibraltar. On June 13th, four of them formed patrol line to guard the commercial anchorage against a submarine which had been sighted.

Eighteen sub-chasers were sent to the Mediterranean to patrol the Gibraltar Barrage, and though they were on that duty only from Nov. 6th to 11th, Admiral Niblack reported that they made four contacts and three attacks, and that one was particularly well conducted and it was "highly probable submarine was damaged, and possibly destroyed."

This group closed its war service with two exciting experiences. On November 10th the S. C. 126, 190 and 353, while on patrol, were mistaken for enemy submarines and were fired upon by the steamship *Bahia*. The next day, about the time the armistice went into effect, a British vessel, without waiting for

recognition signals, fired on the S. C. 214. Luckily the shells missed and the sturdy little boats escaped unscathed.

The organization of our sub-chaser service in European waters was:

At U. S. Naval Headquarters, London—Captain R. H. Leigh, Commander Sub-chasers, Distant Service; Lieutenant Commander W. R. Carter, detection devices; Lieutenant Commander E. C. Raguet, communication officer; Lieutenant Commander R. M. Griffin, sub-chasers; C. F. Scott, technical expert, devices; E. L. Nelson, technical expert, radio.

Sub-chaser Detachment 1, Plymouth—Captain L. A. Cotten, commanding; *Hannibal,* repair ship; *Parker, Aylwin,* destroyers; 36 to 66 sub-chasers.

Submarine Detachment 2, Corfu—Captain C. P. Nelson, commanding; *Hannibal,* repair ship; 36 sub-chasers.

Submarine Detachment 3, Queenstown—Captain A. J. Hepburn, commanding; 30 sub-chasers.

These were the principal bases, though our chasers also did valuable work from Brest, Gibraltar and other points and at the Azores.

Twenty-four sub-chasers assisted in sweeping up the mines of the North Sea Barrage from April to the end of September, 1919, and four were damaged by exploding mines.

The sub-chasers played an important part in operations against the German U-boats off the American coast in the summer of 1918. Scores of them were on patrol along the Atlantic, and speeded to the vicinity whenever a submarine was reported. Immediately after the U-151 appeared off the New Jersey Coast, June 2, a special hunting group was formed of 33 sub-chasers, headed by the destroyers *Jouett, Henley* and *Perkins,* and later another group, headed by the *Patterson,* was organized. These hunters kept on the move, pursuing the "subs" for months, from the Virginia Capes to Nova Scotia.

Many were kept busy escorting coastwise convoys, and patrolling the coast. One group is reported to have escorted from port, with other naval ships, vessels bearing 400,000 troops. Many chasers were almost constantly at sea. The Hampton Roads Squadron, in command of Lieutenant Herbert L. Stone, averaged 75 per cent of the time on duty. Sub-chasers, under Lieutenant Le Sauvage, in the vicinity of Fire Island, when the *San Diego* was lost, were on duty 28 days out of 30.

Patrolling and listening was dangerous work, for the little boats lying in the shipping lines, with all vessels running without lights, might be run down or mistaken for enemy craft. This was the fate of S. C. 209. Shelled and sunk off Fire Island by the steamship *Felix Taussig,* two of her officers, Lieutenant Henry J. Bowes and Ensign E. H. Randolph, and fourteen enlisted men lost their lives.

Keeping open the shipping lines from Mexican and Gulf oil fields was an important duty; it was considered probable that the U-boats would extend their operations to Mexican waters. Consequently we organized a special hunting squadron of 12 sub-chasers, headed by the *U. S. S. Salem* (Captain S. V. Graham), as a part of the American Patrol Detachment commanded by Rear Admiral Anderson, which patrolled the waters of the Gulf and Caribbean.

Twelve sub-chasers served in the Panama Canal Zone, eight being stationed at the Atlantic entrance, and four at the Pacific entrance to the Canal, which it was their mission to protect.

Six chasers were assigned to duty in Nova Scotia, three based on Halifax, and three on Sydney, Cape Breton. Arriving in May, 1918, they were engaged in patrol, convoy and guard duty, and conducted a number of submarine hunts when the U-boats were active in that region. Two were sent with the *Explorer* to Alaska, for protection against alien enemies and disturbing elements which threatened the fish pack and other industries of that region. Sub-chaser 310, to which was assigned the section between the Canadian boundary and Petersburg, visited 112 canneries and other points, covering 6,079 miles. The S. C. 309, which patrolled the remainder of southeast Alaska, visited 132 points and covered 8,500 miles.

Perhaps the most remarkable voyage of these small craft was made by the group built at Puget Sound Navy Yard, near Seattle. These chasers, under command of a reserve officer, Lieutenant Roscoe Howard, all manned by reservists, who were trained at the station while the boats were building, were brought down the Pacific Coast, through the Panama Canal and up to New London, and from there several of them sailed for Europe, reaching the Azores, arriving just as hostilities ended. Sailing from Bremerton May 6, 1918, this group was joined by

others at San Diego, Magdalena Bay and Pinchilinque until there were fifteen in the party. August 4th, at 8 p. m., they arrived at New London, where officers and men began their training in listening and anti-submarine tactics. They had successfully negotiated a voyage of 7,470 miles; escorted 2,985 miles, unescorted 4,485. Three of the Pacific coast boats were in the convoy of 10 American and 19 French chasers which left New London, October 24th, for Europe, Captain H. G. Sparrow, in the cruiser *Chicago,* commanding the convoy. They proceeded via Bermuda, and were only a day off the Azores when the news came that the war was over.

After the armistice, sub-chasers were sent on various missions, to Austria, Turkey, Norway, Sweden, Holland and Denmark. They served from Northern Russia to the Black Sea.

When the work abroad was ended and the homeward bound pennant was flying over these glory-bedecked Cinderellas, the spirit of contest and mastery of the sea did not permit them to be towed back to the United States or to come quietly and deliberately under their own power. Eternal youth and love of victory was in their blood, and ships which had won world applause at Durazzo decided upon a race from the Bermudas.

Six which had rendered conspicuous service—the S. C. 90, 129, 131, 217, 224 and 351—were selected for the contest. Starting at 4:21 p. m., August 16th, their progress was followed with general interest, being reported by the *Ontario,* their escort, and bulletined all over the country.

The race was won by S. C. 131 (Lieutenant Joseph L. Day), which arrived at Ambrose Channel lightship at 1:17 a. m., August 19, 1919. Her running time was 56 hours, 56 minutes—8 hours and 43 minutes less than that made by the *Dream,* which had set the fastest pace in 1914. Four of the others also beat the best previous record.

The sub-chasers, after long and wearing service in the war zone, had excelled the speedy light pleasure craft.

It was a race of thoroughbreds, and when the winner tied up at the Brooklyn Navy Yard, there was the same absence of self exploitation that had signalled the services of the Cinderellas from the first day they began writing glowing pages of new achievement against new enemies.

CHAPTER XVI

"DO NOT SURRENDER"—"NEVER!"

SHIP SHELLED, MEN WOUNDED, NAVY GUNNERS ON "J. L. LUCKENBACH" FOUGHT SUBMARINE FOUR HOURS—ARMED GUARDS SAILING WAR ZONE BEFORE WAR WAS DECLARED—HAD 227 ENCOUNTERS WITH SUBMARINES—FIRST IN SERVICE, THEY WERE FIRST IN SACRIFICE—"HAND IT TO 'EM, JOE!"

NAVY gunners, manning Navy guns on American merchant ships, were sailing the war zone before the United States declared war. First to get into action, these armed guards had more than two hundred encounters with submarines, many of them long-fought gunfire battles. First in service, they were first in sacrifice.

The night President Wilson delivered his war message to Congress, when I returned from the Capitol to my office in the Navy Department, I was greeted by this dispatch from the American Ambassador to France:

Secretary of State, Paris, April 2.
Washington.

Urgent: Foreign Office has just informed me that the American steamer *Aztec* was torpedoed at nine p. m. last night far out at sea off Island of Ushant; that one boat from the steamer has been found with nineteen survivors who were landed this afternoon at Brest. Twenty-eight persons are still missing and although two patrol vessels are searching for them, the stormy condition of sea and weather renders their rescue doubtful. Foreign Office not informed of names of survivors. Will cable further details as soon as obtainable.

SHARP.

A later dispatch stated that only eleven were missing and that Lieutenant William F. Gresham and the boys from the *Dolphin* were safe. This possessed a personal interest for me, for the *Dolphin* was the vessel assigned to the Secretary of the

Navy, and had furnished this first crew for an armed ship. The news that night was reassuring, but we were saddened to learn, next day, that one of our seamen had gone down—John I. Eopolucci, of Washington, the first man of the American armed forces to lose his life in service against Germany.

The first officer lost was Lieutenant Clarence C. Thomas, of Grass Valley, California, commander of the armed guard on the *Vacuum,* who, with four of his men, perished after the sinking of that steamer on April 28th.

The *Mongolia* was first to report a "hit" against a submarine, April 19th, Lieutenant Bruce Ware stating that a shell from his guns struck the U-boat's conning-tower, knocking off part of the shell-plating, a cloud of smoke covering the spot where the "sub" disappeared.

Not long afterward a cablegram was received from Paris announcing that an American armed vessel had sunk a submarine in the Mediterranean. The ship was the *Silver Shell,* and the encounter, which occurred off the Balearic Islands, was thus reported by Chief Turret Captain William J. Clark:

> May 30, at 5:35 p. m., a submarine was sighted off starboard beam, flying no flag or marks of identification. Manned and loaded both guns. Hoisted colors and waited about 10 minutes. Fired after-gun with sights set at 4,000 yards, scale 49, and fired purposely short to see what the submarine would do, as she was closing in on the *Silver Shell.* At the same instant of our flash, the submarine fired a shot, the shell dropping 100 yards short amidships. The ship was swung to port to bring the submarine astern.
>
> Twenty-five rounds were fired at the submarine, the last two of which appeared to be hits. As the last shot landed the submarine's bow raised up and went down suddenly. The crew of the submarine, who were on deck, did not have time to get inside, so it is believed there is not much doubt about her being hit. The submarine fired in all 32 rounds, the last four of which were shrapnel and exploded overhead.

The master of the *Silver Shell,* John Charlton, was convinced that the submarine was destroyed, and in his report said: "One shot struck the submarine flush, hitting the ammunition on the deck. There was a flash of flame, and within a minute she had disappeared." Captain John R. Edie, U. S. N. (retired), the naval representative who investigated the matter and heard all the evidence, made a report, dated Toulon, June 3, in

which he said: "There is no doubt in my mind but that the submarine was sunk."

The combats of the *Campana, Luckenbach, Nyanza, Chincha, Borinquen, Norlina, Moreni* and a score of others are among the thrilling incidents of the war. These armed guards of 16 to 32 men, usually under command of a chief petty officer, served on practically every American merchant vessel that plied the war zone, and made a record for bravery and efficiency which would be difficult to excel.

One of the longest fights on record was that of the *J. L. Luckenbach,* which began at 7:30 o'clock, the morning of October 19, 1917, and continued four hours. The submarine, which was disguised as a steamer, opened fire at long range. The *Luckenbach* instantly replied with both her guns. Closing in to 2,000 yards, the U-boat, which was of large type, with heavy ordnance, began to pour forth a rain of shells. One shot exploded on the deck, partially destroying the gun-crew's quarters, bursting the fire-main, and setting afire that part of the ship. Another shot landed near the stern, putting the after-gun out of commission.

Pieces of shell were falling all around the deck. Two shots landed on the port side forward, striking the oilers' room and blowing a large hole in the ship's side. One struck on the port side at the water-line, hitting the fresh-water tank, the water supply pouring out. Another burst in the petty officers' mess-room, wounding two men. One shot passed through the weather screen on the bridge, and exploded in the cargo. Pieces of shell hit V. Louther, of the armed guard, wounding him in three places. While carrying ammunition forward, a sailor was hit and severely injured, and a gunner was blinded by fumes. Then a shell exploded in the engine-room, wounding the first and third engineers, and putting the engine out of business.

Struck a dozen times, with exploding shells overhead sending down a hail of steel, nine men wounded and its engine disabled, the *Luckenbach* fought on. Its armed guard was under command of J. B. Trautner, chief master-at-arms.

Distress signals had been sent out soon after the firing began, hours before, and had been answered by the *Nicholson,* 82 miles away. The destroyer was hurrying to the steamer's assistance at high speed; but it hardly seemed possible for her

to arrive in time. There was a constant exchange of messages between steamship and destroyer:

"S. O. S.—*J. L. Luckenbach* being gunned by submarine."
"We are coming," signalled the *Nicholson.*
"Our steam is cut off. How soon can you get here?"
"Stick to it; will be with you in three hours."
"Shell burst in engine-room. Engineer crippled."
"Fire in our forehold. They are now shooting at our antennae."
"How far are you away?" asked the *Luckenbach.* "Code books thrown overboard. How soon will you arrive?"
"In two hours," answered the *Nicholson.*
"Too late," replied the *Luckenbach.* "Look out for boats. They are shelling us."
"Do not surrender!" radioed the *Nicholson.*
"Never!" answered the *Luckenbach.*

It was after eleven o'clock when smoke was seen and the ship headed towards the destroyer to lessen the distance. Then that shell exploded in the engine-room, and put the engine out of business. As the *Nicholson* approached, her guns were loaded and pointed, the torpedo-tubes made ready, and the crew prepared for action. The watch-officer in the foretop reported that he could see the ship, smoke coming out of her hull and shells splashing around her.

Then he sighted the U-boat far away, but almost dead ahead. "Train and fire!" ordered the captain. "Boom!" went the gun. The U-boat risked another shell or two at the steamer. But when the destroyer's third shot landed close by, the "sub" quickly submerged, and hurried away. The U-boat had fired 225 rounds, the *Luckenbach* 202. When the destroyer reached the scene, the enemy was gone, hidden under water, leaving hardly a trace.

The *Nicholson* sent her surgeon and senior watch-officer to the damaged steamer. They dressed the wounds of the injured nine. Two armed guardsmen were found lying under a gun, seriously hurt. The third, hit in three places by shell fragments, was walking around the deck, his cap cocked over his ear, proud as a game rooster. Not stopping after he was first hit, he was carrying ammunition to the gun when he was struck again in the shoulder. As he laid his projectile on the deck, another fragment of flying shell hit him. Then he really got

mad. Shaking his fist toward the "sub," he shouted, "No damned German's going to hit me three times and get away with it." Grabbing his shell off the deck, he slammed it into the breech, and yelled to the gun-pointer, "Hand it to 'em, Joe!"

The ship's engineer had two ribs smashed, a piece of shrapnel in his neck, and part of his foot shot away. He was lying down, "cussing" the Germans. "Put me on my feet, men," he asked, and two oilers set him up. For ten minutes more he poured out a steady stream of denunciation of the "blankety-blank" U-boats. After he had expressed, in all the languages he could command, his full and free opinion of the whole German nation, he went to work, repaired the engine, got up steam and the *Luckenbach* began to move.

Some of the men were so seriously wounded that the *Nicholson's* doctor was left on the steamer to care for them. Soon afterward he found he was the senior naval officer aboard, and all looked to him for orders. He was a doctor, not a navigator. The ship was bound for Havre, going alone through the submarine-infested zone. Running without lights in a locality where vessels were numerous was a risky business, which increased in danger as they neared the coast. The skipper was not sure of his course. He had never made a port in France before, and knew nothing of the tides. The mates were equally uncertain.

The doctor trusted to them until three o'clock in the morning, when he found the ship had run aground. Then he took a hand in navigation. The captain and the mate were examining a chart on deck and wondering how they had missed the shore light. Studying the charts, the doctor told them they should have been twenty miles further east, and said, "Now, I'll take charge."

Fortunately, it was low tide when the ship went on the beach, and when the flood-tide came at daylight, the vessel, using her engines, was backed off. By eleven o'clock they had reached the entrance to Havre.

Seeing her coming, with the marks of battle upon her, the people crowded down to the water-front. They cheered the Navy gun-crew, the sailors, and there were tears for the wounded and cheers for the doctor as he came down the gang-plank with them.

Attacked by a submarine off the Spanish coast, a shell exploded in the gasoline tank of the *Moreni* and set the ship afire. Chief Boatswain's Mate Andrew Copassaki and his gun-crew had begun firing as soon as the "sub" was sighted, but the *Moreni* was slow and the U-boat had a decided advantage. Raining shells upon the ship, the enemy shot away her steering gear, and the vessel, beyond control, began steaming around in a circle, but the naval gunners kept shooting away.

Two men were wounded; one life-boat upset as it struck the water and two of the merchant crew were drowned. But the armed guard kept up the fight until the entire ship was in flames. During the contest, which lasted over two hours, the *Moreni* fired 150 shots, the submarine 200. The ship was hit 45 times. When the Spanish steamship *Valbanera* came up to rescue the survivors, both the Spaniards and the Germans aboard the submarine cheered the *Moreni's* naval gun-crew for the brave fight they had made.

After his return to this country, I had the pleasure of congratulating Copassaki, who came to my office. Tall and bronzed, with a sweeping black moustache, he was a stalwart figure, modest as he was brave.

"That must have been a thrilling experience you had," I remarked as I thanked him. "It must have been terrific for those men at the guns, with the flames mounting around them." "It was pretty hot," modestly replied Copassaki, who seemed to think that about covered the subject.

The first Americans taken prisoner by the Germans were Chief Gunner's Mate James Delaney, four members of the armed guard and the master of the *Campana,* which was sunk about 150 miles from the French coast on August 6, 1917. But they were captured only after a running fight of more than four hours, during which the *Campana* fired 170 shots and the U-boat twice as many. After three hours' firing, the *Campana's* captain wanted to stop and abandon ship to avoid casualties, as the vessel was clearly outranged by the more powerful guns of the submarine, but Delaney protested, and kept up the fight for an hour and ten minutes longer, firing until his ammunition was exhausted.

The submarine, the U-61, headed for the life-boats, keeping

its 6-inch gun and revolvers pointed at the survivors. They took aboard Delaney and four of his gunners, and Captain Oliver, the ship's master.

Believing Delaney was a lieutenant, the U-boat officers grilled him for hours with questions, but could get nothing out of him. The German captain congratulated him, and told him that he had put up the longest fight any merchantman had ever made against a submarine. The U-boat had not only shot away most of its shells, but had fired two torpedoes at the *Campana,* and its captain told Delaney he would have to carry him and some of his gunners to Germany, as otherwise they could hardly make their authorities believe they had had to expend so much ammunition to "get" a single ship.

That evening about six o'clock, the U-61 encountered a decoy ship. Coming up on what appeared to be an unarmed vessel, they fired three shots, and one of the Germans sitting near Delaney remarked, "One more ship." But she was not the easy prey they thought she was, and the U-boat had to make a quick dive to escape. "All the sailors rushed down through the hatch, the submarine seemed to stand on her bow end, and everything capsized as she submerged," Delaney said. "We went down 62 meters. Everybody was scared, and they said our Allies were trying to drown us."

After seven days' cruising the U-boat arrived at Heligoland, where Delaney and his men were landed, and then sent to Wilhelmshaven. After four days in barracks, they were taken to the prison camp at Brandenburg, where there were 10,000 prisoners, British, French and Italian. Conditions in the camp, which was built around a small lake which served as a sewage dump, were almost intolerable, and many prisoners died. When Delaney protested against the guards stealing parcels sent to prisoners, he was hauled up and "strafed" by the officers. He defied them and a sergeant drew his sword, and threatened to run it through the American sailor. But the others held him back. The six Americans had many trying experiences, and were not released until after the armistice; yet all survived and, leaving Germany December 8, 1918, returned safely home.

Dodging a torpedo, which missed her by only ten feet, facing a storm of shells and shrapnel, the *Nyanza* fought until the

U-boat keeled over, and went down. This engagement occurred thirty miles west of Penmarch, France, on a Sunday morning, January 13, 1918. At 9:30 a periscope, silver plated, was sighted 1,000 yards away, and at the same instant a torpedo was seen, heading for the vessel. The helm was put hard aport, and the ship swung clear in time to avoid the torpedo.

The naval gunners opened fire. Falling astern, the submarine came to the surface and gave chase, zigzagging and firing both her guns, using shrapnel. Chief Gunner's Mate Benjamin H. Groves, in reporting the encounter, said:

> At first her shots fell short, but eventually he got our range and hit us five times. One shot passed through the after-gun platform, through the wood shelter house, through the iron deck, breaking a deck beam, exploding in the hold, and passing out through the side of the ship. One shot exploded in the armed guard's mess room, wrecking the place completely. Two shots exploded in a steam locomotive on deck, doing some damage. One shot hit the stern of the ship, but did not go through.
>
> About 11:15 the submarine had our range good again. The ship zigzagged a little, which caused his shots to fall a little to the right or left of our ship. At the same time, I had his range and fired four shells quick at 7,800 yards, causing him to come broadside to and keel over, then suddenly disappeared just as he had our own range good. This leads me to think he did not quit from choice, but from necessity.
>
> The engagement lasted two hours and 30 minutes. I fired 92 rounds, and the submarine fired approximately 200.

Admiral Wilson highly commended the *Nyanza's* master, her second officer and the armed guard, while Admiral Sims wrote: "The *Nyanza* was undoubtedly saved by the prompt work of the ship's personnel and by the efficient work of the guns' crew."

The *Navajo* had a lively encounter with a submarine in the English Channel July 4, 1917, and the court at Havre, which investigated the matter, reported to the French Ministry of Marine that "the fight was very well conducted," the men showing "a very fine spirit, doing honor to the American Navy," and "the conclusion may be drawn that the submarine was hit and probably sunk." Describing the engagement, Chief Boatswain's Mate H. L. Ham reported:

> On July 4, at 9:20 a. m., heavy gunfire was heard to starboard and shortly afterward the *Navajo* ran out of the mist and sighted a sub-

marine firing on a British topsail schooner about two miles away. The *Navajo* changed her course, the fog shut down again and the "sub" was lost sight of. This was about 55 miles northwest of Cape La Hague, France.

About 2:55 p. m. the same day the fog lifted and two shots were heard from a point 1,500 yards distant. Upon observation a submarine was seen firing with both guns at the *Navajo*. The first shot dropped 50 yards short on the starboard beam; the second one went over the ship. The *Navajo* was swung, bringing the submarine about three points on the starboard quarter, and opened fire with her after-gun.

The submarine fired about 40 shots during the engagement, which lasted 40 minutes, one of which hit the *Navajo* underneath the port counter. This shell exploded before hitting the ship and displaced some of the plates, causing the *Navajo* to leak.

The *Navajo* in return fired 27 shots, the last two of which were hits. The twenty-seventh shot struck the submarine just forward of the conning tower where the ammunition hoist was located, causing an explosion on board the submarine which was plainly heard on the *Navajo*. The men who were on deck at the guns and had not jumped overboard ran aft. The submarine then carted forward at almost 40 degrees and the propeller could be seen lashing the air. Nobody was seen coming up through the conning tower and jumping into the sea, nor were any survivors seen.

The armed guard commander concluded: "It is my opinion that the submarine was sunk."

The men of the *Borinquen* were also convinced that they sank a U-boat which they encountered in latitude 56°-32′ north, longitude 10°-46′ west, June 4, 1917. Chief Gunner's Mate T. J. Beerman reported:

Submarine was laying to when first sighted. We think she was receiving news from her headquarters. After-gun could not bear on her then and while the trainer was training gun around to bear, loader fired pistol to wake up men in the shelter house, at the same time hoisting our colors. Pointer turned on lights and dropped sights from 500 yards to 100 yards. As soon as after-gun could bear she opened fire. I did not see the first shot, but petty officer said it went just over top of submarine's conning tower. I saw the second shot hit, exploding and carrying away the conning tower. She was about three points abaft the port beam.

The ship putting stern to submarine, the third shot was fired about astern. I saw it hit and explode. After second shot the submarine seemed to be stopped and lay in trough of sea at the mercy of the gun. The last seen of her she was going down on swell, listed to port, with

her bow sticking in air and her stern down. She was going down in an upright position.

Struck by a torpedo, the *Norlina,* after "abandon ship" was ordered and its men had taken to the boats, manned its guns and when the U-boat reappeared, put the enemy out of business. This engagement, which took place June 4, 1917, in latitude 56°-32′ north, longitude 10°-46′ west, was one of the queerest of war incidents.

At 6:30 p. m., a man on the forward gun platform shouted, "Torpedo!" As the ship turned the torpedo hit just abaft the beam, glanced off aft around the stern, and sank. The first mate sounded the "abandon ship," signal and the crew made for the lifeboats. Lieutenant Commander J. Foster, captain of the vessel, three of his mates and the armed guard commander remained aboard. Inspecting the vessel, they found it in no danger of sinking, and called all hands to return. Chief Boatswain's Mate O. J. Gullickson, commanding the armed guard, reported:

As boats came alongside, a periscope was sighted off the starboard beam. Guns were manned, commenced firing from forward gun, range 2,000 yards. In the meantime the captain had gotten the engineers below and we got under way, heading toward periscope. Continued firing from both guns, all shots coming very close to the periscope, submarine changing speed.

Suddenly shot from forward gun hit just in front of periscope, making it submerge, and a light blue smoke came up from astern of the submarine. Periscope appeared again, range now 600 yards, when a shot from the after-gun hit it square on the water line, making small bits of steel fly, which may have been bursting of shell, and causing a great commotion of bubbles, etc., in the water.

In the meanwhile the captain, seeing the submarine getting closer all the time and expecting another torpedo any second, ordered all engineers on deck, causing the ship to be absolutely still in the water during most of the firing. Hoisted in all boats, laying to from 6:30 until 9:05 p. m., seeing no more of submarine, which was apparently either sunk or badly damaged.

"It seems certain that the submarine was either sunk or disabled," Lieutenant Commander Foster wrote in the ship's log, which gave every detail of the encounter.

On June 8, 1917, when the steamship *W. H. Tilford* was off

Spezia Bay, Italy, a periscope was sighted, 1,500 yards off the starboard beam. Twenty rounds were fired rapidly from the ship's gun, the armed guard commander reported; and "the submarine came to the surface and made for the beach," where an Italian torpedo boat took charge of her.

Off the Spanish coast, two or three miles from Sabinal Point, the *Chincha* at 7:25, the morning of January 18, 1918, sighted an object like an enormous whale. Chief Gunner's Mate E. E. Nordquist, commanding the armed guard, had a good look at it and decided it was one of the latest type submarines. In his report, he said:

> I commenced firing, range 2,200 yards. After third shot all shots fired were good. Fired 10 shots, when submarine disappeared. At 8:15 submarine again showed itself about 2,000 yards off our starboard quarter. Commencing firing fifth shot, which caused an explosion and a volume of black smoke was seen. Submarine now turned around and headed away from us. As submarine did not dive, I continued the fire. Although nearly all shots seemed to hit, but five exploded. The fourth explosion caused another volume of black smoke. The submarine did not try to dive, but seemed to be trying to come up. As I thought she was trying to come up for shell fire at us, I kept on firing.
>
> The submarine now headed for the beach about 1½ miles away; 29 shots had been fired at her the second time. One of the last shots had hit and exploded close, or at, where her propellers were churning. As she was heading for the beach and quite a ways off, I ceased firing. The bow swells of the submarine could still be seen, but the churn of the propellers had ceased. Shortly all disappeared, about 4,000 yards away.

On March 21, the *Chincha,* whose armed guard was then commanded by E. D. Arnold, chief boatswain's mate, encountered a large type submarine, which was driven off. But one of its shots struck the vessel, killing one member of the armed guard, and two of the ship's crew.

El Occidente had an exciting fight on February 2, the armed guard commander, Chief Boatswain's Mate Dow Ripley, reporting that the ship was apparently attacked by two submarines. One discharged a torpedo, then came toward the vessel with a rush. The Navy gunners got the range, Ripley reported, and "as their shots were hitting on top of her, she suddenly disappeared, acting as if in distress."

When the *Santa Maria* was torpedoed, February 25, Chief Boatswain's Mate John Weber and his armed guardsmen stood at the guns until the water swept around them. Chief Gunner's Mate Joseph E. Reiter and the gunners on the *Paulsboro,* when that vessel was attacked, held their posts while shells burst above and shrapnel fell all around them, drove off the U-boat and saved the ship.

Twenty-four men—eight of the armed guard, and 16 of the merchant crew—were lost in the sinking of the *Motano,* which was torpedoed the night of July 31, 1917, in the English Channel off Portland. The vessel sank in less than a minute after she was struck. There was no time to launch life-boats, and the men on deck were washed into the sea.

Survivors of merchant vessels sunk far from land, left in open boats to make their way to shore as best they could, underwent terrible hardships. When the *Rochester* was sunk November 2, 1917, 300 miles from the Irish coast, the second engineer and an oiler were killed by the explosion of the torpedo. One of the three life-boats was lost. In another four of the crew perished before reaching land, and three died later from exposure. Five men of the armed guard were lost at sea and one died after rescue.

After the sinking of the *Actaeon* (the ex-German *Adamstrum*), November 24, 1917, a boat containing 19 of the armed guard and 6 of the merchant crew became separated from the other boats, lost its course, and rowed, sailed and drifted for eleven days before it reached Cape Villano, near Coruña, Spain. Four men died before reaching shore, three of the armed guard and one of the merchant crew.

The *Armenia* seemed to afford a special target for the U-boats. She was torpedoed on two occasions, but, though badly damaged, was, in each instance, safely taken to port and repaired. The night of December 5, 1917, about 20 miles from Dartmouth Light, England, a torpedo tore a hole 31 feet long and 15 feet wide in the *Armenia's* port side. Part of the crew took to the boats, thinking the ship would sink almost immediately; but the ship's captain and the head of the armed guard, Stief Homiak, chief boatswain's mate, remained aboard. Prompt measures were taken to keep the vessel afloat, the armed

guard working with the crew. The hole in the side was covered with collision mats and other devices to keep out the water, and though the hold was flooded, the vessel was successfully navigated into Dartmouth. Two months later, after repairs were completed, the *Armenia* left Dartmouth, February 8, 1918, for West Hartlepool. Shortly after midnight, when about nine miles off St. Catherine's Light, Isle of Wight, she was struck by a torpedo which opened up a hole 40 by 30 feet, carried away the stern-post and propeller and broke the tail-shaft. Tugs came from shore and towed the vessel to Stokes Bay, and she was again repaired.

The submarines, particularly in the early months of the war, seemed especially anxious to get one of the American liners, *St. Louis, St. Paul, New York* and *Philadelphia.* Time and again, U-boats were sighted, evidently lying in wait for these fast steamers. The *Philadelphia,* on one occasion, sighted a periscope only a few hundred yards distant and saw the torpedo as it left the tube. By quick maneuvering, the steamship turned and escaped the missile. The *St. Louis* had several experiences with them. Sighting a periscope on the port beam, she opened a rapid fire and drove off the U-boat. Another time a torpedo was seen only 200 yards away, and then a periscope popped up, but by speed and quick maneuvering the liner escaped. Again a submarine was sighted three miles distant. The *St. Louis* opened fire and for nearly half an hour there was a running fight between "sub" and liner until at last the *St. Louis* sailed out of range.

There were many instances in which prompt and effective gunfire repulsed submarines, and in most cases where the U-boat's guns were not of superior range, the ship escaped. Thus on July 10, 1917, the *Gold Shell* drove off a "sub," as did the *Dakotan* on Sept. 6, 1917.

The *Albert Watts* and *Westoil,* oil tankers, had a thrilling encounter Nov. 28, 1917, with two submarines which, when first observed, were within 300 yards. Blazing away with all their guns, the ships compelled the enemy to dive to escape shelling. Then ensued a running fight that continued for four hours. Every now and then a periscope would bob up, in an effort to get in position to launch torpedoes. But the ships would fire

again, and the periscopes disappear. At 10:30 the *Watts* struck a mine, and was damaged, but remained afloat. The rest of the convoy got to port that afternoon, and a few hours later the *Watts* arrived, crippled but still in the game.

The *Westoil* had another brush with the enemy March 12, 1918, when a "sub" appeared some distance astern. After a running fight the submarine gave up the contest, though she was of big type, and her guns were apparently heavier than those of the *Westoil*. The vessel's fire was too accurate for her; for the armed guard commander was a "sure shot," a gun-pointer from one of our dreadnaughts who in five years had never missed in short-range battle practice. They were "some gunners," those men of the armed guards!

I could fill a book with the exploits of these guards, for the Navy furnished guns and gunners to 384 vessels, and this service at one time or another employed 30,000 men. Begun March 12, 1917, in accordance with the President's order, the arming of merchantmen proceeded until nearly every American ship crossing the Atlantic was provided with this protection. The Bureau of Ordnance scoured the country for all the guns of proper calibers that were available, and some were even taken from cruisers and older battleships, to be replaced later when more could be manufactured. But crews were always ready and the guns were secured and installed in record time. Statistics compiled by an officer of the Armed Guard Section show that:

The 384 merchant ships armed made 1832 trans-Atlantic trips while in armed guard status.

347 sightings of enemy submarines were reported.

227 attacks by submarines were classified as "actual."

Only 29 ships carrying armed guards were torpedoed and sunk.

Two ships were sunk by shell-fire, both after long engagements.

193 attacks were successfully repulsed.

34 attacks resulted in probable damage to enemy submarines.

Of the 2,738,026 tons of American merchant shipping armed, only 166,428 tons was sunk by submarines. As a result of attacks repulsed, 1,400,000 tons of American shipping were saved.

Could there be better evidence of the success of this undertaking, or the courage and efficiency of the gunners who protected our merchant ships?

CHAPTER XVII

WHEN THE U-BOATS CAME TO AMERICA

WAR OFF OUR COASTS FROM MAY TO SEPTEMBER, 1918—GERMANS SENT SUBMARINES TO INTERRUPT TROOP AND SUPPLY TRANSPORTATION, BUT TRANSPORTS WERE SO WELL GUARDED THAT NOT ONE WAS ATTACKED OR EVEN DELAYED—MANY SCHOONERS AND SOME STEAMERS SUNK, BARGES AND LIGHTSHIP SHELLED, BUT GERMANS FAILED IN THEIR MAIN OBJECT.

EUROPE was not the only "war zone." There was war off our own coasts from May to September, 1918, and the Navy had to protect transports and shipping, to escort convoys and hunt submarines on this side of the Atlantic as well as off the coasts of Great Britain and France.

During that period the Navy was as much in active war service in home waters as it was in Europe. And our methods were quite as successful here as there, for in the entire four months in which German submarines operated off our coasts not one convoy was attacked, and not one transport was delayed in sailing.

Will you ever forget that Sunday, June 2, 1918, when a German submarine suddenly appeared off the New Jersey coast and sank six vessels, ending the day with the destruction of the passenger steamer *Carolina?*

The first news came at 5:30 p. m., from the Ward Liner *Mexico,* which radioed that she had picked up three life-boats containing fifty men of the *Isabel B. Wiley* and other schooners that had been sunk. This message was immediately broadcasted with a warning to all ships along the coast. Naval vessels were at once ordered to the vicinity and patrol craft in that region and all along the coast were notified to keep a sharp lookout for the submarine.

The passenger steamer *Carolina,* en route to New York from

Porto Rico, was 13 miles from where the *Wiley* was sunk, when she received the warning at 5:55 o'clock. Darkening her lights, she steered due west, putting on full speed. The captain had just got his vessel steadied on the new course, when he sighted the submarine two miles away. In a moment or two the U-boat fired three shells, which landed near the steamer. At the second shot the captain stopped his ship. He had ordered the wireless operator to send out an "SOS" signal, stating that the vessel was attacked by submarine. But, realizing, he said, the uselessness of trying to escape, and fearing if he sent out radio messages the U-boat might shell the ship, endangering the lives of those aboard, the captain recalled the order. The radio operator stated that the submarine had wirelessed to him, under low power, "If you don't use wireless I won't shoot." That was the reason we were so long in getting news of the sinking of the *Carolina.* She sent out no distress signals.

At his third shot, the submarine bore down on the vessel, which was flying the signal "A.B."—abandon ship—and was lowering its lifeboats. "Women and children first," was the rule, and after they had been placed safely, the men entered the boats. As the captain, the last to leave, cleared the ship's side, the submarine commander ordered him to make for shore. The U-boat fired several shells into the vessel, and she finally sank at 7:55 p. m., with the American ensign and signals flying. Clouds of fire and steam arose as she went down.

The *Carolina* carried 218 passengers, and a crew of 117. All got safely into the lifeboats, which were moored head and stern, one to the other, except the motor sailer and boat No. 5, and all headed for shore, on a westward course. They had smooth seas until midnight, when a squall came on with heavy rain and lightning. The boats, which were connected by lines, were anchored until the storm passed. At daylight they began to proceed singly, to make rowing easier.

At 11 o'clock the storm-tossed survivors sighted a schooner, the *Eva B. Douglas,* which took aboard all that were in sight, 160 passengers and 94 of the crew. But about noon one boat, in attempting to weather the rough seas, capsized, drowning seven passengers and six of the crew. There were still three boats to be accounted for. The next day, 19 survivors were

picked up and carried to Vineyard Haven, and 18 were rescued by the British steamer *Appleby,* and taken to Lewes, Delaware. Lifeboat No. 5 was rowed to shore, and the thousands along the Boardwalk were amazed when it came in sight and was landed through the surf at Atlantic City.

That Monday, June 3rd, was one of the busiest days of the war in the Navy Department, as it was at naval bases all along the Atlantic. The fact that the Germans were operating off our shores stirred up not only Washington but the entire country.

Plans for submarine defense had been made out long before, and were put into effect. Our patrol force, all along the line, was on the job. But hunting a U-boat and capturing it are two very different things.

News and rumors were pouring in, and when I received the newspaper correspondents I faced a fire of questions as rapid as that of a machine-gun:

"What is the Navy doing to protect shipping?"

"Why did it let the submarine sink those vessels?"

"Have you sunk the U-boat?"

"What naval vessels have you sent out? What methods are they using to get the 'sub'?"

"How many boats have the Germans sent over?"

"Have you got enough vessels to protect our coast and commerce?"

"Will you recall our destroyers from Europe?"

As I was doing my best to answer the questions of the gentlemen of the press, who had a right to know everything that was not of advantage to the enemy, telegrams were pouring into the Department by the hundred, and the telephones were ringing without cessation. In twenty-four hours, 5,000 telegrams, radio messages, 'phone calls and other inquiries were handled by the Navy. The halls and offices of the Department were thronged with anxious people, shippers and ship-owners, friends and relatives of captains and crews. And everybody wanted information.

There was alarm along the coast, from Cape Cod to Key West. If one U-boat was over here, two might be or three or more. That was the general feeling.

One of the most persistent questions, which came from the country, as well as the press, was whether we were going to recall our destroyers from Europe—and in many cases this was put not as an inquiry but a demand.

We could not tell the public what we were doing, what ships were being sent out, and where. That was just what the Germans wanted to know. Most of our destroyers and the best of our patrol craft were in European waters, 3,000 miles away, performing vital duty against the enemy in England, Ireland, France and Italy. We had no idea of recalling them.

Thousands of vessels would have been required to patrol every mile of our long coast-line, and guard all the boats off our shores. Our duty was clear. The Germans had sent their U-boats across the sea mainly to interrupt the transportation of troops and supplies. If they did not succeed in that, their coming would have no real military effect.

"Our first duty," I said to the newspaper men that morning, "is to keep open the road to France, to protect troop-ships and Army supply vessels. We are doing all we can to protect all shipping and commerce, but the safety of troops must be our first thought."

The policy was so well carried out that not one troop-ship or cargo transport was delayed in sailing, and the months in which enemy submarines operated almost continuously off our coasts were the very months in which we broke all records in troop transportation.

The first submarine that came over in 1918 was the U-151, and the first craft she sank were three small schooners, the *Hattie Dunn, Hauppauge* and *Edna,* all sent down by bombs the same day, May 25th. To prevent disclosure of her presence, she kept the crews of all three, 23 men, imprisoned aboard her, and sailed well out at sea, submerging whenever a large vessel was sighted, until June 2nd, when she sank three other schooners, the *Isabel Wiley, Jacob M. Haskell* and *Edward H. Cole;* a small steamer, the *Winneconne,* and late in the afternoon attacked the steamships *Texel* and *Carolina.* All the *Texel's* crew were saved, but they rowed to shore and the story of her sinking was not told until they reached Atlantic City next morning. En route from Porto Rico to New York, with a cargo of sugar, the

Texel was stopped at 4:21 p. m. by the firing of shells, one of which struck the vessel, and an hour later was sunk by bombs placed aboard.

By sinking only small boats which had no radio apparatus, and holding their crews prisoners, the U-151 had for ten days concealed her whereabouts. But the Navy had warned shipping to be on the lookout, and on May 16th had sent this message to all section bases:

Most Secret:—From information gained by contact with enemy submarine, one may be encountered anywhere west of 40 degrees west. No lights should be carried, except as may be necessary to avoid collision, and paravanes should be used when practicable and feasible. Acknowledge, Commander-in-Chief Atlantic Fleet; Commander Cruiser Force, Commander Patrol Squadron, Flag San Domingo, Governor Virgin Islands, Commandants 1st to 8th, inclusive, and 15th Naval Districts. 13016.

OPNAV.

The Department had been notified from London Headquarters early in May that a large-type submarine had left Germany for American waters, and on May 15th, the British steamer *Huntress* reported that she had escaped a torpedo attack in latitude 34°-28′ north, longitude 56°-09′ west, about 1,000 miles east of Cape Hatteras. Four days later the *Nyanza* was attacked 300 miles from our coast; the *Jonancy* was gunned about 150 miles at sea, and on May 21st the British steamer *Crenelia* reported sighting a submarine.

This information was disseminated to all section bases, coast defense commanders and forces afloat; and in addition to the regular patrols, special sub-chaser detachments were organized, and ordered to proceed, upon the receipt of any "SOS" or "Allo" message, to the vessel attacked or in distress.

Comprehensive plans for defense, protection of shipping and combating the U-boats had been made long previously. Before we entered the war a general scheme had been adopted, a patrol force and naval districts organized. From that time on we had maintained a vigilant lookout for the German craft. A special Planning Board had been created in February, 1918, to study the situation afresh and recommend any additional measures that might be adopted for coast defense, and protec-

tion of shipping. These plans, approved March 6, placed coastwise shipping under the control of district commandants, district boundaries being, for this purpose, extended seaward and sharply defined. On May 4 a circular letter was sent to all ship-owners and masters, detailing the procedure they were to follow. Commandants were instructed to see that all routing preliminaries and shipping requirements and military and commercial arrangements on shore were made and thoroughly understood by all the interests concerned.

The morning of June 3rd, the order was issued to commandants, "Assume control of coastwise shipping and handle traffic in accordance therewith;" and the following warning was sent out:

> Unmistakable evidence enemy submarine immediately off coast between Cape Hatteras and Block Island. Vessels not properly convoyed advised to make port until further directed.

A Coastwise Routing Office was organized in the Navy Department as a part of Naval Operations. Every naval district had its arrangement for routing and convoying traffic in and through its areas. The commandant made up the convoy, outlined its route, and provided escort through his territory, each district in succession relieving the previous escort. Thus naval protection was provided for shipping all along the coast.

Routing offices were also established at Halifax, Nova Scotia; at Havana, San Juan and all leading West Indian ports; and Tampico, Mexico—in fact, eventually at every Atlantic port where coastwise shipping was likely to originate.

Through the Naval Communication Service full information as to convoys, rendezvous and other details were sent in code. Each ship's master, before sailing, was required to go to the routing office and receive written instructions as to the route to be followed and areas to be avoided. He was given all the latest submarine information and was told of the signals and the location of each "speaking station."

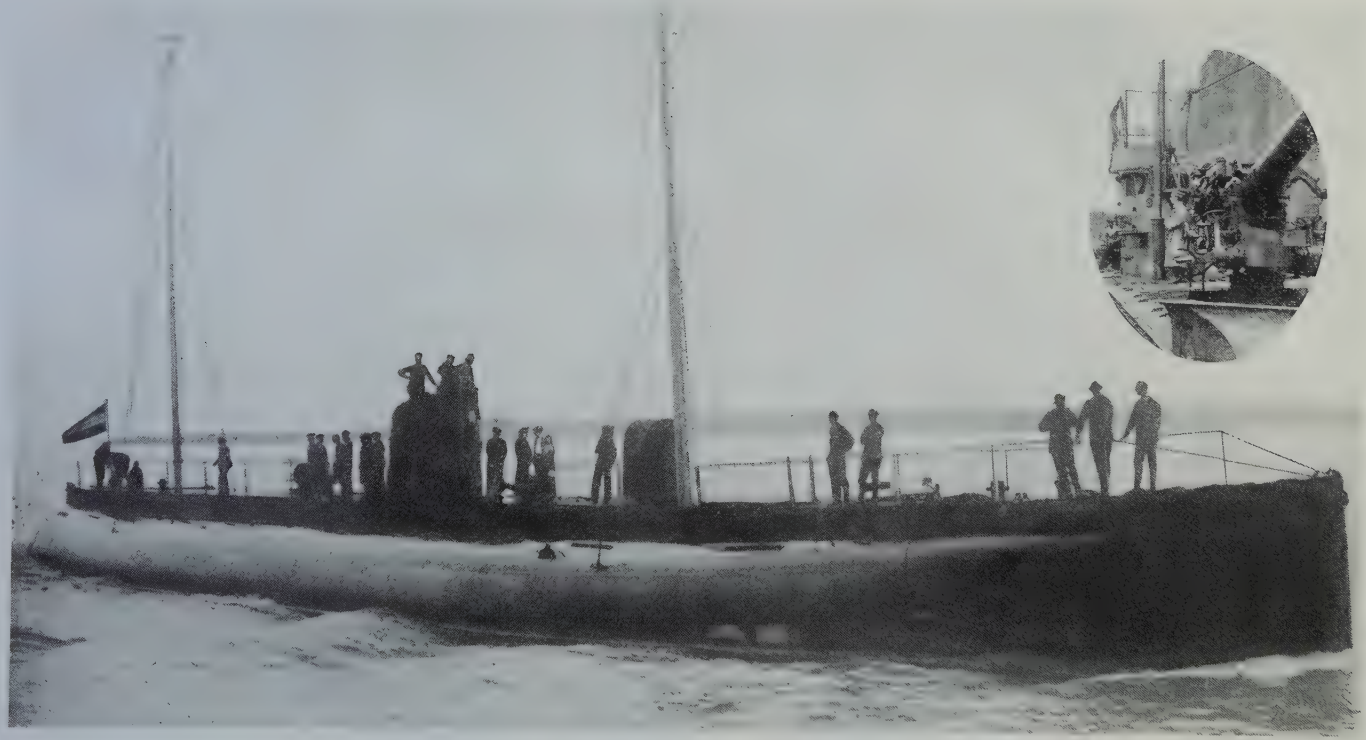
These speaking stations were established at various points along the coast. Manned by navy personnel, using a simple code of distance signals, they could communicate with ships not equipped with radio, call vessels into harbor if necessary, and

From the painting by Frederick J. Waugh

THE GUN-CREW OF THE LUCKENBACH HAS A FOUR-HOUR FIGHT WITH A SUBMARINE

From the painting by George Bellows

CHIEF GUNNER'S MATE DELANEY, OF THE CAMPANA, DEFYING HIS CAPTORS



THE MERCHANT SUBMARINE DEUTSCHLAND IN BALTIMORE HARBOR

Inset: Gun mounted on the U-155, as the Deutschland was called after its conversion into a war craft.

divert them from dangerous localities. They performed a valuable function in expediting the flow of shipping from district to district, as well as, by prompt action, warning craft in danger. Ships at sea received by radio all war warnings and orders, and when it was necessary to divert convoys, orders to change course could be sent at a moment's notice. Far south were two "reporting" stations. Vessels passing out of the Gulf of Mexico coastwise-bound were required to report at Sand Key, those northbound through the Old Bahama passage, to report at Jupiter.

Thus escort was provided for vessels through all the areas in which submarines were likely to operate, and a system provided by which the Navy could keep track of and in touch with them from the time they sailed until they reached port. Though this necessitated a large fleet of escorting vessels, of which our best were at work in Europe, by utilizing all the patrol craft that could be secured and our sturdy little sub-chasers, we managed to provide sufficient escorts.

It is a notable fact that, while the submarines sank many schooners and fishing craft and some steamers proceeding independently, during the entire four months in which the U-boats operated in the Western Atlantic not one convoy, coastwise or trans-Atlantic, was attacked off the coast of the United States.

The alarm which occurred when the U-boats first appeared quickly subsided. The details of the comprehensive system the Navy had put into effect could not then be published. But the naval committees of Congress knew, for we could impart this information, in confidence, to them. To find out for themselves whether the Navy was doing everything possible to protect shipping and repel the Germans, Senators and Representatives came to the Navy Department, and examined all our plans and arrangements.

Senator Lodge well expressed their convictions in his speech in the Senate on June 6th, 1918, when he said:

> The Navy and the Navy Department have taken every precaution that human foresight could suggest, so far as I am able to judge, and I have examined their preparations with such intelligence and care as I could give to the matter. * * *
>
> Mr. President, the Navy and the Navy Department have necessarily

anticipated a submarine attack from the very beginning of the war. They have had it constantly on their minds. They have tried to make every preparation to meet it. I think they have. It would be most injurious for me to stand here and follow down the map of the coast and tell the Senate and the public exactly what those preparations are—tell them where the submarine chasers are, where the destroyers are, where the signal stations are, what arrangements they have made for meeting the danger when it came, as they were sure it would come. No human mind can possibly tell when out of the great waste of waters of the Atlantic Ocean a submarine, which travels by night and submerges by day, will appear. As soon as the Navy had any authentic news to indicate the presence of submarines on this coast they acted. They will do everything that can be done. They have the means to do it. That is all that I feel at liberty to say in a general way.

Mr. President, for four years the greatest Navy in the world has been devoting its strength to the destruction of German submarines. They were operating in what are known as the narrow seas, where the commerce of the world, we may say, comes together in a closely restricted area; and even there, with the knowledge for years of the presence of the German submarines, it is not going too far to say that many of those submarines escaped them. They are diminishing now, with our assistance. A larger control is being established over the narrow seas, and the work against the submarines at the point of the greatest danger—what we may call the naval front of this war—is succeeding more than many of us dared to hope. It is done by the multiplication of vessels and the multiplication of methods, and there is the great center of the fight.

One or two submarines have appeared suddenly on our coast, as was to be anticipated. In my judgment, we are doing all that can be done. I have taken the pains to go to the Department, where everything has been laid before the members of the Naval Affairs Committee who cared to investigate the subject, and I am entirely satisfied that they are doing everything that is possible. But the chase of the submarine is something like searching for the needle in the haystack. You can not tell in which particular wisp of hay it will come to the surface; but that the defense will be effective I have no sort of question. * * *

We have a patrol along the coast, which is composed chiefly of what is known as the Life-Saving Service, or the Coast Guard, as it is now known. We also have an organized system for procuring information from fishermen and others on the coast, extending from Maine to the Gulf. Those sources of information were organized and in operation through the Navy Department at least two years before we entered the war, so I believe that so far as our own coasts are concerned the chances of a base there are almost negligible. * * *

I did not rise to go into the details to describe to you the different naval districts of the country and what has been done in each one of

them, but simply to tell you what my own opinion is after having examined all the arrangements with the utmost care of which I was capable and with the most intense interest, and I give my word for what it is worth, that in my judgment the Navy and the Navy Department, the Secretary and Assistant Secretary, and all the officers, the Chief of Staff, and every head of a bureau has done everything that human foresight could suggest. * * *

I want the Senate also to remember that when newspaper editorials ask what the Navy is doing I should like to have them consider why it is that we have sent all the troops we have sent—and we have sent a great many thousands—why it is that they have gone to Europe without the loss of a transport, thank God, as I do. How is it that that has happened? It has happened because of the American Navy, which furnished the convoys, and no other cause.

I wish I could go on and tell you what the American Navy has been doing in the narrow seas. I can not. The Navy has remained largely silent about its work and its preparation, and it is one of the best things about it, but it has been doing the greatest possible work everywhere. It has not failed in convoying the troops. It has not failed in its work in the Baltic and the Channel and the coast of France and the Mediterranean, and it will not fail here. It will do everything that courage and intelligence and bravery can possibly do.

In addition to the elusive U-boat, mines laid by the "subs" also proved a constant danger, quite as much as gunfire, bombs and torpedoes. The afternoon of June 3, the tanker *Herbert L. Pratt* struck a mine two and a half miles off Overfalls lightship, and sank. But she was not in deep water, and was quickly salvaged and towed to Philadelphia. Late that evening at 6 o'clock, the U-151, in another locality, overhauled and sank the *Sam C. Mengel.* The first officer, John W. Wilkins, stated that when the crew were leaving the schooner, the German boarding-officer shook hands with them, and exclaimed:

"Send Wilson out here and we will finish him in ten minutes. Wilson is the only one prolonging the war."

Next morning an "SOS" call came from the French tanker *Radioleine,* "attacked by submarine." The coast torpedo-boat *Hull* (Lieutenant R. S. Haggart), rushed to her assistance. Zigzagging and firing her stern-gun, the steamer was putting up a good defense, though shells were falling around her. But before the *Hull* could get within firing distance, the U-boat dived and scurried off. As the *Radioleine,* relieved, sailed away, the *Hull* picked up the crew of the schooner *Edward R. Baird, Jr.,*

which had been bombed two hours before, but was still afloat, though water-logged, with decks awash.

Moving around from point to point, in the next week the U-151 sank six steamships, one an American steamer, the *Pinar Del Rio,* and then headed for Germany.

Naval vessels were on the lookout all the time. But when the submarine did attack any craft which had radio, it prevented them, if possible, from sending out signals or messages of distress. This was a great handicap to the naval commanders, as it prevented them from knowing where the U-boat was operating. The moment a periscope was reported, they speeded for the scene.

As it departed for home, the submarine attacked two British steamers, the *Llanstephan Castle* and *Keemun,* both of which escaped, and later sank two Norwegian barks, the *Samoa* and *Kringsjaa,* 150 miles at sea. Though sighted several times by merchantmen, the U-151 made no further attacks until June 18th, when she torpedoed the British steamship *Dwinsk,* far out in the Atlantic. The vessel remained afloat and two hours later was sunk by gunfire.

Soon afterward the *U. S. S. Von Steuben* arrived on the scene and bore down on the lifeboats. The submarine fired a torpedo at her, but the cruiser transport avoided the deadly missile, and blazed away at the "sub's" periscope. She fired 19 shots and dropped numerous depth-charges. But the U-boat submerged and got away and three days later, about 200 miles further east, sank the Belgian *Chilier.* The Norwegian steamer *Augvald* was sunk June 23. This was the last vessel sunk, though the submarine made several unsuccessful attacks on British and American ships.

The U-151 reached Germany August 1, having left Kiel April 14. In a cruise of nearly three months she had sunk 23 vessels, of 59,000 gross tons. Some submarines in European waters had destroyed that much tonnage in a week or two.

But this was only the beginning of submarine operations. The U-156, commanded by Kapitän-Leutnant von Oldenburg, left Germany for America June 15, and on July 5 attacked, almost in mid-Atlantic, the *U. S. S. Lake Bridge,* which after a running fight outdistanced her.

Her first appearance in our waters was on July 21st, when she bobbed up near Cape Cod, Mass., and attacked the tug *Perth Amboy* and four barges in tow. Three torpedoes were fired at the tug, it was stated. A shell crashed through the wheelhouse, and cut off the hand of a sailor as he grasped the spokes of the steering wheel. The tug on fire, the German turned his attention to the barges, and kept firing away until several men were wounded and the helpless craft went down. Three women and five children were aboard the barges. They, with the crews, were reached by boats from Coast Guard Station No. 40, and landed at Nauset Harbor.

Seaplanes from the Chatham naval air station flew to the scene and attacked the submarine, dropping aerial bombs. Though the haze obscured the view, bombs fell very near the U-boat, and one or two, it was reported, actually struck her but failed to explode. Not relishing this attack from the air, the German submerged and started for Canadian waters.

Sinking a fishing schooner 60 miles southeast of Cape Porpoise, and burning another near the entrance to the Bay of Fundy, the raider turned her attention to the fishing fleet around Seal Island, Nova Scotia, sinking four American schooners and three Canadians. She also sank the Canadian tanker *Luz Blanca* and the Swedish steamer *Sydland*. On August 11 the British steamship *Penistone* was torpedoed and sunk, her master, David Evans, taken prisoner, and the *Herman Winter*, an American steamer, was attacked, but escaped uninjured. Sailing southward the U-boat, a week later, sank the *San Jose*, and Evans was released and allowed to get into a lifeboat with the Norwegian crew.

The U-156 then went northward again, and on August 20 captured the Canadian steam trawler *Triumph*, and armed her as a raider, placing a German crew aboard. Operating together, they sank a dozen schooners in Canadian waters. Sinking the Canadian schooner *Gloaming*, on August 26, the U-156 started on her homeward voyage. The only attack she made returning was unsuccessful, an encounter on August 31 with the *U. S. S. West Haven*, which drove her off.

Beginning by attacking barges and tugs, devoting most of her time to sinking small fishing craft, the U-156 met an in-

glorious end in the Northern Mine Barrage. Attempting to "run" the barrage, she struck a mine and sank so quickly that, apparently, many of her men did not have time to escape. Twenty-one survivors were landed on the Norwegian Coast; the fate of the rest of the crew is unknown. It seems like fate that this raider which destroyed so many helpless little American vessels should have been sent down by that creation which was mainly American, the great barrage which, 3,500 miles from this country, stretched across the North Sea.

At the same time the U-156 was slaying fishing craft in the north, another German submarine, commanded by Korvetten-Kapitän Kophamel, the U-140, was operating in southern waters. Leaving Kiel June 22, only a week after the U-156, this big undersea boat began work almost in mid-ocean July 18, gunning the American tanker *Joseph Cudahy.* On the 26th she fired on two British vessels, and later on the *Kermanshah.* All these attacks were unsuccessful, but she succeeded in sinking the Portuguese bark *Porto,* and on August 1 the Japanese steamship *Tokuyama* was torpedoed 200 miles southeast of New York.

The U-140 had a long and hot fight, before she sank, August 4th, her first American vessel, the tanker *O. B. Jennings,* Captain George W. Nordstrom, master; one man being killed and several wounded, before the ship was sent down. Then the U-140, sinking a schooner on the way, headed for Diamond Shoals, on the North Carolina coast, near Cape Hatteras.

The *Merak,* a Dutch steamship taken over by the Americans, was sailing along at eight knots, when, at 1:40 p. m., a shot crossed her bow. Putting about, the *Merak* made for shore, zigzagging, the submarine pursuing, firing a shell a minute. After the thirtieth shot, the *Merak* ran aground and her crew took to the boats. The Germans boarded the steamer, bombed her, and then turned their attention to other vessels. Three were in sight, the steamers *Beucleuch* and *Mariner's Harbor,* and the Diamond Shoals lightship.

First they turned their guns on the lightship. Unarmed, with no means of defense, this vessel of 590 tons was of the same type as the other ships which are stationed at various points along the coast to keep their lights burning and warn mariners off dangerous points. To destroy one of these coast sentinels is

like shooting down a light-house. But the Germans evidently thought its destruction would cause a shock and arouse indignation, if nothing else. So they shot down the sentinel of Diamond Shoals, while the lightships' crew took to the boats and saved their lives by rowing to shore. Then the U-140 attacked the *Beucleuch,* but the British steamer was too fast for her, and in the meantime the *Mariner's Harbor,* too, had escaped.

No more was heard of the U-140 until August 10, when she attacked the Brazilian steamer *Uberaba.* The destroyer *Stringham* went at once to the steamship's assistance and drove off the enemy. The Brazilians later presented the destroyer with a silk American flag and a silver loving-cup, to express their thanks for the timely aid given by the *Stringham* in saving the *Uberaba* from destruction.

After a brush with the *U. S. S. Pastores,* whose gunfire proved too hot to face, the U-140 proceeded several hundred miles north, keeping well out at sea, and was not heard from for a week. Then on August 21, after a gunfire contest, she sank the British steamer *Diomed,* and the next night attacked the *Pleiades,* an American cargo vessel, whose shots fell so close around the submarine that it was glad to get away.

That was the last experience, near our coast, of the U-140, which was already headed for Germany. She had been damaged, whether by our shells or depth-bombs, or from some other cause could not be ascertained. Her passage was slow until she was joined by the U-117, September 9. They proceeded in company toward Germany, the U-140 reaching Kiel October 25.

The U-117, a mine-layer of large type, commanded by Kapitän-Leutnant Droscher, had left Germany early in July, and her first exploit on this side of the Atlantic was a raid on the fishing fleet, near George's Bank, a hundred miles or more east of Cape Cod. In one day, August 10th, she sank nine little schooners of 18 to 54 tons. Coming nearer shore, she torpedoed and sank the Norwegian steamer *Sommerstadt,* 25 miles southeast of Fire Island. The torpedo made a circle around the vessel and returning, exploded, her master, Captain George Hansen, declared, saying:

The torpedo went about 1,300 fathoms on the starboard side; then it started to turn to the left. When I saw the torpedo start to swerve

around, I gave orders for full speed ahead. After it passed the bow it made two turns, making a complete circle, and then struck our vessel aft on the port side exactly between the third and fourth holds, right at the bulkhead.

The next afternoon the *Frederick R. Kellogg,* an American tanker, was torpedoed 30 miles south of Ambrose Channel lightship. The torpedo struck in the engine-room, and the ship went down in fifteen seconds, her master, Captain C. H. White, stated. Two steel decks and a wooden deck were blown up, and a lifeboat was blown in the air. The engineer, his third assistant, one fireman and an oiler were killed or drowned. The ship sank in shallow water, however, and was later raised, towed to port and repaired.

The submarine sank the schooner *Dorothy B. Barrett* and the motor-ship *Madrugada,* and on the 17th sent down, 120 miles southeast of Cape Henry, the *Nordhav,* a Norwegian bark, whose survivors were rescued by the battleship *Kearsarge.* The U-117 had a long combat on August 20, with the Italian steamer *Ansaldo III,* the steamer escaping after a gun duel that lasted nearly three hours, and the next day had another running fight with the British *Thespis,* which was also unsuccessful.

The final exploit of the U-117 on this side of the ocean was the sinking of two Canadian schooners on August 30th. She then started across the Atlantic, ten days later joining the U-140.

It was not until early in August that the *Deutschland,* which had made two trips to the United States as a commercial submarine in 1916, left Germany for American waters. Her operations were mainly far out at sea or in Canadian waters, and she never came within 200 or 300 miles of the United States coast.

Renamed the U-155, the *Deutschland* began her activities on this expedition on August 27, 1918, when she attacked the American steamship *Montoso* almost in mid-Atlantic. It was at night, about 9 o'clock, when the *Montoso* and the *Rondo* and *Ticonderoga,* which were with her, opened fire. The submarine fired several shots, but the guns of our vessels drove it off.

Five days later the *Deutschland* attacked the *U. S. S. Frank H. Buck,* opening fire with two six-inch guns. Firing first with

its 3-inch forward gun, then putting into action its six-incher, the *Buck* made a vigorous reply. Her shots were falling close to the "sub," but enemy shrapnel was bursting above the vessel and falling on deck. The *Buck* reported that one of her shots apparently hit right at the stern of the U-boat and another forward of the conning tower, under the water line. The submarine then disappeared. She seemed to have been damaged, but not enough to put her out of commission, for on September 2nd she sank the Norwegian steamer *Shortind* and on the 7th chased and shelled the British steamship *Monmouth.* Five days later she torpedoed the Portuguese steamer *Leixoes,* three of the crew being lost, one going down with the ship and two dying of cold and exposure in the lifeboats.

September 13th was an unlucky day for the *Deutschland,* for in a gunfire contest with the armed British merchantman *Newby Hall,* she was struck by a shell which exploded and temporarily put out of action her forward gun. For the next week she seems to have devoted her attention to mine-laying, off Halifax and the Nova Scotian coast. Then she sank a small steam trawler, the *Kingfisher,* and on Sept. 29th unsuccessfully attacked the British steamer *Reginolite.* On October 3 and 4, she sank the Italian steamship *Alberto Treves* and the British schooner *Industrial.*

At 10 a. m., Oct. 12th, the *Deutschland* attacked the American steamship *Amphion,* formerly the German *Köln.* Her second shot carried away the steamer's wireless. Then ensued a gunfire contest that lasted more than an hour, the submarine firing some 200 shots and the *Amphion* 72. The *Amphion* was hit time and again, her lifeboats were riddled, and her superstructure damaged, but she gradually drew off and the U-boat abandoned the chase.

The last American steamer sunk during the war was the *Lucia,* known as the "non-sinkable" ship—and the reports indicate that it was the *Deutschland* that sank her. The *Lucia,* a U. S. Shipping Board vessel used as an army cargo transport, had been fitted up with buoyancy boxes. There was considerable interest in this experiment, proposed and carried out by the Naval Consulting Board, accounts of which had been widely published. These boxes did not render the vessel unsinkable,

but it is a significant fact that she remained afloat twenty-two hours after she was torpedoed.

It was 5:30 p. m., October 17, when the torpedo struck in the engine-room, killing four men. Though the submarine was not seen, the naval armed guard stood at their guns, which were trained in the direction from which the torpedo came. The civilian crew took to the life-boats as the vessel settled slowly. The gunners remained aboard until 1:30 o'clock the next afternoon, when the seas were breaking over the gun platform. The *Lucia* did not finally disappear beneath the waves until 3:20 p. m., October 18th.

After sinking the *Lucia,* the former *Deutschland* cruised towards the Azores, and did not reach Kiel until November 15, four days after the armistice.

There was one other submarine assigned to operate in American waters, and which started out from Kiel, late in August, for this purpose. This was the U-152, a large craft of the *Deutschland* type, commanded by Kapitän-Leutnant Franz. Though she never got within hundreds of miles of our coast, on September 30th she sank the animal transport *Ticonderoga,* and caused the largest loss of life any of our ships sustained in action. But this took place in the Eastern Atlantic, latitude 43°-05′ north, longitude 38°-43′ west, nearer Europe than America. It was the U-152 with which the *U. S. S. George G. Henry* had a two-hour running fight on September 29th, in which the *Henry* came off victor. This was not far from the point where the *Ticonderoga* went down.

The nearest point she came to the United States was on October 13th, when she sank the Norwegian bark *Stifinder,* in latitude 37°-22′ north, longitude 53°-30′ west, 600 miles or more from our coast.

Next to attacking vessels, the most menacing activity of the U-boats was mine-laying. They sowed mines at various points from Cape Hatteras to Nova Scotia and mine-fields were discovered off Fire Island, N. Y.; Barnegat, N. J.; Five Fathom Bank, near the entrance to Delaware River; Fenwick Island, off the Delaware Coast; Winter Quarter Shoal and the Virginia Capes, and Wimble Shoals, near the North Carolina coast. Single mines were picked up at other points.

Every protective measure possible was employed against them. A fleet of mine-sweepers was constantly engaged in sweeping channels and entrances to harbors, and every point where there was reason to believe mines might be laid. Fifty-nine vessels were engaged in this duty, most of them assigned to the districts which handled the largest volume of shipping.

Naval vessels and the larger merchantmen carried paravanes, which swept up mines and carried them off from the vessel, where they could be destroyed. But even the paravanes were not always effective.

It was one of these floating mines which sank the cruiser *San Diego* July 19, 1918, off Fire Island. The battleship *Minnesota* struck one of them at night, September 29th, at 3:15 a. m., twenty miles from Fenwick Island Shoals lightship. Though the explosion, under her starboard bow, seriously damaged the hull and flooded the forward compartments, the *Minnesota* proceeded to port under her own steam, arriving at 7:45 p. m. at the Philadelphia Navy Yard, where she was docked and repaired.

The British steamship *Mirlo* was blown up off Wimble Shoal buoy, near Cape Hatteras, at 3:30 p. m., August 16th. The ship, which was loaded with gasoline, took fire, and one explosion after another occurred, breaking the vessel in two. The *San Saba,* formerly the *Colorado,* was sunk off Barnegat, October 4th. Struck amidships, the vessel practically broke in two, and sank in fire minutes. The *Chaparra,* a Cuban steamer, was blown up ten miles from Barnegat Light, October 27th.

The U. S. cargo steamer *Saetia* (Lieutenant Commander W. S. Lynch), bound for Philadelphia from France, was sunk by a mine on November 9th, two days before the armistice. The ship was ten miles southeast of Fenwick Island Shoals when an explosion occurred under No. 2 hatch, which shattered the vessel and sent it down. Besides the crew there were aboard 11 army officers and 74 soldiers. All were rescued.

Enemy mines, scattered, as they were, over a thousand miles, would undoubtedly have taken a much greater toll of shipping if the Navy had not been so energetic in sweeping mines and destroying them whenever they appeared.

Summarizing the entire operations of German submarines

which were assigned to American waters, 79 vessels were sunk by gunfire or bombs. Of these 17 were steamers, the others being sailing vessels, most of them small schooners and motor boats. Of the 14 steamers torpedoed, but two were American, the *Ticonderoga* and *Lucia,* both of which were sunk far out in the Atlantic, hundreds of miles from our shores. Of the seven vessels mined, one, the *Minnesota,* got to port under her own steam, and another, the tanker *Herbert L. Pratt,* was salvaged, both being repaired and put back into service. Several vessels sunk or bombed by submarine were later recovered and repaired, including the big steamer *Frederick R. Kellogg.*

Only nine American steamers were lost by submarine activities in American waters—the *Winneconne,* 1,869 tons; *Texel,* 3,210; *Carolina,* 5,093; *Pinar del Rio,* 2,504; *O. B. Jennings,* 10,289; *Merak* (ex-Dutch), 3,024 tons, all destroyed by direct attack; and the *San Diego,* 13,680 tons displacement; the *San Saba,* 2,458, and the *Saetia,* 2,873 gross tons, sunk by mines—a total tonnage of 45,000.

In their chief mission of preventing transportation to Europe, the U-boats failed utterly. The flow of troops, supplies and munitions to France and England was not for a moment interrupted. In fact, it was precisely this period in which it was increased, and we transported to Europe over 300,000 soldiers per month.

Not one troop-convoy was even attacked. So well were all convoys protected by naval escort that the submarines avoided them. Furthermore, they avoided all naval vessels and when one was sighted, the "sub" instantly submerged, usually when the man-of-war was miles away. This made it difficult for our ships even to get a shot at them.

They had thousands of miles of water to cruise in, and could choose their own field of operations. Driven from one point, they shifted to another, often disappearing for days, then emerging in some locality hundreds of miles from where they were last seen. If the U-boats were generally able to elude for months the thousands of British, French and American patrol and escort craft in narrow European waters, how much more difficult it was to run down the few, on this side of the ocean, who could range from Nova Scotia to the Gulf of Mexico.

Though we needed the best and all the patrol craft we could get, not one of our destroyers or any other vessel was recalled from Europe. In fact, more were sent over to reinforce them. Operating for months with submarines of the largest type, the Germans failed to achieve any real military success, and while they sank many small craft and a substantial amount of ocean shipping, and cut a few cables, their raids on the American coast had no effect whatever upon the trend of the war.

CHAPTER XVIII

MARINES STOPPED DRIVE ON PARIS

THROWN INTO THE BREACH WITH OTHER AMERICANS IN CHATEAU-THIERRY SECTOR, THEY HALTED GERMANS—FIGHTING DESPERATELY FOR DAYS, MARINES CLEARED BELLEAU WOOD—CAPTURE OF BLANC MONT RIDGE, THE KEY TO RHEIMS—CROSSED THE MEUSE UNDER HEAVY FIRE THE MORNING OF THE ARMISTICE—IN GERMANY IN ARMY OF OCCUPATION.

ENTER the Marines!

It was the evening of Memorial Day, May 30, 1918, that they were ordered to the most critical point in the battle lines. Paris was threatened more sorely than it had been since the Battle of the Marne. The Germans were only forty miles away. Hurdling the Chemin-des-Dames, taking Soissons, they had overcome the strongest French defenses, and were moving on at the rate of five or six miles a day. Capture of the city seemed imminent. Parisians by thousands were trekking to safer abodes. Archives were packed; preparations made to move government offices and set up a temporary capital in the southwest.

To the rescue came the Americans—the Second Division, which included the Marines; and elements of the Third and Twenty-eighth Divisions. "Move at 10 p. m. by bus to new area," was the order received by the Fifth and Sixth Marine Regiments, and the Sixth Machine-Gun Battalion. Seventy-five miles from the field, they had to travel in camions, not even the officers knowing their ultimate destination. But all were in happy mood, sure they were bound for the front.

The roads were crowded with French, men, women and children hurrying away from the battle lines, seeking safety. Only the Americans rode ahead—always forward. They had

no tanks, gas-shells, or flame projectors. They were untried in open warfare and they had to go up against Germany's best troops. The French hesitated to risk all to them in the crisis.

"Let us fight in our own way," said General Harbord, "and we will stop them."

Permission was granted. In their own way they fought and won. Colonel (later Brigadier General) A. W. Catlin, who commanded the Sixth Regiment, showed his officers the map, indicating the points to be held, and the maps were passed around to the men so they would have all the information available. "I hold," said he, "that men like ours fight none the worse for knowing just what they are fighting for." One secret of Marine efficiency in combat is the comradeship between officers and men. "Theirs not to reason why" has no place in their vocabulary.

When they arrived, June 1st, the Marines were told to "dig in." As tools they used bayonets and the lids of their mess-gear. "Say, you'd be surprised to know just how much digging you can do under those circumstances," remarked Private Geiger afterwards as he lay wounded in a hospital. "Bullets and shrapnel came from everywhere. You'd work until it seemed you couldn't budge another inch, when a shell would hit right close and then you'd start digging with as much energy as if you had just begun."

At ten o'clock, on June 2nd, they were ordered to back up the overtaxed French. It was the second battalion of the Fifth Marines, and particularly the 55th Company, which bore the brunt of the assault at Les Mares Ferme, the point where the Germans came nearest Paris.

The 55th Company had orders to take position one and a half kilometers northeast of Marigny. The French, a few kilometers ahead, were reported falling back, and soon began filtering through. The enemy attack was launched at 5 p. m. against the French who had remained in front of Wise's battalion at Hill 165. The Germans swept down the wide wheat fields. The French, pressed back, fought as they retreated.

Neville's Fifth Marines opened up with a slashing barrage, mowing down the Germans. Trained marksmen, sharpshooters, they calmly set their sights and aimed with the same precision they had shown upon the rifle ranges at Parris Island

and Quantico. The French said they had never seen such marksmanship in the heat of battle. Incessantly their rifles cracked, and with their fire came the support of the artillery. The machine-guns, pouring forth a hail of bullets, also began to make inroads in the advancing lines. Caught in a seething wave of scattering shrapnel, machine-gun and rifle fire, the Germans found further advance would be suicide. The lines hesitated, then stopped. The enemy broke for cover, while the Marines raked the woods and ravines in which they had taken refuge.

Above, a French airplane was checking up on the artillery fire. Surprised at seeing men set their sights, adjust their range, and fire deliberately at an advancing foe, each man picking his target, not firing merely in the direction of the enemy, the aviator signaled "Bravo!" In the rear that word was echoed again and again. The German drive on Paris had been stopped.

The next few days were devoted to pushing forth outposts and testing the strength of the enemy. The fighting had changed. Mystified at running against a stone wall of defense just when they believed that their advance would be easiest, the Germans had halted, amazed. Put on the defensive, they strove desperately to hold their lines. Belleau Wood had been planted thickly with nest after nest of machine-guns. In that jungle of trees, matted underbrush, of rocks, of vines and heavy foliage, the Germans had placed themselves in positions they believed impregnable. Unless they could be routed and thrown back the breaking of the attack of June 2 would mean nothing. There would come another drive and another. The battle of Chateau-Thierry was not won and could not be won until Belleau Wood had been cleared of the enemy.

On June 6, the Americans began the assault on that wood and the strategic positions adjacent, the towns of Torcy and Bouresches being the objectives. At 5 p. m. the Marines attacked. It was a desperate task. Before they started, their officers cheered them. "Give 'em hell!" was the command Colonel Catlin is said to have given. They gave it to them, but paid a heavy price in blood. As the Marines advanced, the German artillery let loose a storm of fire. Men on every hand were killed or injured. Brave Berry was struck in the arm, but

LEADERS OF THE MARINES

Upper row: Major General John A. Lejeune, Brigadier Generals Wendell C. Neville, and Logan Feland.
Lower row: Brigadier Generals Smedley D. Butler, A. W. Catlin, Harry Lee.

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THE MARINES IN BELLEAU WOOD

with the blood streaming from his sleeve, he kept on until exhausted. Just as daring Sibley's men reached the edge of the woods a sniper's bullet hit Colonel Catlin in the chest. Severely wounded, he was relieved in command by Lieutenant Colonel Harry Lee.

But the lines never halted or wavered. Fighting strictly according to American methods, a rush, a halt, a rush again, in four-wave formation, the rear waves taking over the work of those who had fallen before them, the Marines moved ever forward. Passing over the bodies of their dead comrades, they plunged ahead. They might be torn to bits, but behind them were more waves, and the attack went on.

"Men fell like flies," reported an officer writing from the field. Companies that had entered the battle 250 strong dwindled to fifty and sixty, with a sergeant in command; but the attack did not falter. At 9:45 o'clock that night Bouresches was taken by Lieutenant James F. Robertson and twenty-odd men of his platoon. They were soon joined by reinforcements. The enemy made counter attacks, but the Marines held the town. Leading his men through the machine-gun fire, Captain Donald Duncan, of the 96th Company, was killed.

In Belleau Wood the fighting had been literally from tree to tree, stronghold to stronghold; and it was a fight which must last for weeks before victory was complete. Every rocky formation was a German machine-gun nest, almost impossible to reach by artillery or grenades. There was only one way to wipe out these nests—by the bayonet. And by this method were they wiped out, for United States Marines, bare-chested, shouting their battle cry of "E-e-e-e-e y-a-a-h-h-h yip!" charged straight into the murderous fire from those guns and won! Out of those that charged, in more than one instance, only one would reach the stronghold. There, with his bayonet as his only weapon, he would kill or capture the defenders and then, swinging the gun about, turn it against remaining German positions.

Fighting in that forest of horror for eighteen days, the Marines on June 25 began the last rush for possession of the wood. Following a tremendous barrage, the struggle started. The barrage literally tore the woods to pieces, but could not wipe out all the nests. They had to be taken by the bayonet.

But in the day that followed every foot of Belleau Wood was cleared of the enemy. On June 26th Major Shearer sent the message: "Woods now U. S. Marine Corps entirely."

In the terrific fighting in that month, the Marine Corps lost 1,062 men killed, and 3,615 wounded. Hundreds of Germans were captured. In the final assault, Major Shearer's command alone took 500 prisoners. General Pershing sent a telegram of commendation on June 9, and, visiting division headquarters, sent his personal greetings to the Marine Brigade, adding that Marshal Foch had especially charged him to give the Brigade his love and congratulations on its fine work.

Division General Degoutte, commanding the Sixth French Army, on June 30 issued a general order that, henceforth, in all official papers, Belleau Wood should be named, "Bois de la Brigade de Marine." It was thereafter known as the "Wood of the Marines."

General Pershing in his final report said:

> The Second Division then in reserve northwest of Paris and preparing to relieve the First Division, was hastily diverted to the vicinity of Meaux on May 31, and, early on the morning of June 1st, was deployed across the Chateau-Thierry-Paris road near Montreuil-aux-Lions in a gap in the French line, where it stopped the German advance.

Praise and full credit are due the other troops in that sector —the Third Division whose machine-gun battalion held the bridge-head at the Marne, and whose Seventh Regiment fought for several days in Belleau Wood; the artillery and engineers who supported every advance; and all who were engaged in the Chateau-Thierry sector. Though the principal honors went to the Second Division and the Marines, all the Americans in that region fought well and nobly.

President Wilson said they "closed the gap the enemy had succeeded in opening for their advance on Paris," and, driving back the Germans, began "the rout that was to save Europe and the world." Mayors of the Meaux district, who, as they stated, were eye-witnesses of the American Army's deeds in stopping the enemy advance, formally expressed their admiration and gratitude, and Mayor Lugol, in transmitting the resolution, June 26th, wrote:

The civilian population of this part of the country will never forget that the beginning of this month of June, when their homes were threatened by the invader, the Second American Division victoriously stepped forth and succeeded in saving them from impending danger.

After personal investigation, and study of the area, Melville E. Stone, manager of the Associated Press, declared that in spite of heavy losses, the Americans engaged in the operations at and around Chateau-Thierry did three things:

1. They saved Paris.
2. They seriously injured the morale of the best German troops.
3. They set a standard for American troops that none others dared to tarnish.

General Omar Bundy, commanding the Second Division, in General Order No. 41, issued July 10, said:

You stood like a stone wall against the enemy advance on Paris. . . . . You have engaged and defeated with great loss three German divisions, and have occupied the important strong-points of the Belleau Woods, Bouresches, and Vaux. You have taken about 1,400 prisoners, many machine guns and much other material.

General Petain, Commander-in-Chief of the French Armies of the North and Northeast, issued a general order citing and commending the Marines, mentioning by name Brigadier General James G. Harbord, commanding the Fourth Brigade; Colonel Wendell C. Neville, commanding the Fifth Regiment; Colonel A. W. Catlin, commanding the Sixth Regiment, and Major Edward B. Cole, commanding the Sixth Machine Gun Battalion. Colonel Neville commanded the Fifth through all these operations, fighting with his men in Belleau Wood. When Colonel Catlin was wounded, he was, as I have stated, succeeded in command of the Sixth by Lieutenant Colonel Harry Lee, who continued to command that regiment to the end of the war. When, leading his machine-gunners, Major Edward B. Cole fell, mortally wounded, on June 10th, Captain Harlan E. Major took charge. A day or two later he was relieved by Captain George H. Osterhout, and on June 21st Major Littleton W. T. Waller, Jr., took command of the Sixth Machine-Gun Battalion.

The real beginning of the great series of offensives which

finally routed the German armies and brought complete victory to the Allies, was when Marshal Foch, on July 18, with picked troops made a vigorous thrust at the Germans near Soissons, with overwhelming success. The First and Second U. S. Divisions and the French Moroccan Division were employed as the spearhead of the main attack.

At a single bound they broke through the enemy's infantry defenses, overran his artillery, and cut the German communications. The Second Division took Beaurepaire Farm and Vierzy in a rapid advance, and at the end of the second day was in front of Tigny, having captured 3,000 prisoners and 66 field-guns. "The story of your achievements," said General Harbord, "will be told in millions of homes in all Allied lands tonight."

"Due to the magnificent dash and power displayed by our First and Second Divisions, the tide of war was definitely turned in favor of the Allies," said General Pershing. Soissons was relieved, and the Germans began a general withdrawal from the Marne. General Harbord was in command of the Second Division, Colonel Neville of the Marine Brigade; Colonel Logan Feland of the Fifth Regiment, Colonel Lee of the Sixth, and Major Waller of the Machine-Gun Battalion in this operation, known as the "Aisne-Marne offensive."

General John A. Lejeune, U. S. Marine Corps, on July 29, assumed command of the Second Division, which he commanded with marked distinction to the end of hostilities, during its service with the Army of Occupation in Germany, and until the Division, on its return to America in August, 1919, was demobilized.

Of the six Allied offensives designated as major operations on the Western Front in 1918, the Marines, with the other units of the Second Division, took part in three. In the battle for the St. Mihiel salient, the division on September 11th took up a line running from Remenauville to Limey, and on the morning of the 12th attacked. Overcoming the enemy resistance, they romped through to the Rupt de Mad, a small river, crossed it on stone bridges, occupied Thiaucourt, scaled the heights beyond and pushed on to a line running from the Xammes-Jaulny ridges to Bonvaux Forest. Then they rested, having occupied two days' objectives before 3 p. m. of the first day. The Divi-

sion's casualties were about 1,000 men, 134 killed. It had captured eighty German officers, 3,200 men, 120 cannon and a vast amount of stores.

The taking of Blanc Mont Ridge, the key to Rheims, was one of the most effective blows struck by the Allies. Determined to break through the powerful German defenses in the Champagne, Marshal Foch asked for an American division. The Second was selected, and General Lejeune, on September 27th, was summoned to French headquarters.

Pointing to a large relief map of the battlefield, General Gouraud, who directed the operations, said to General Lejeune: "General, this position is the key of all the German defenses of this sector including the whole Rheims Massif. If this ridge can be taken the Germans will be obliged to retreat along the whole front 30 kilometers to the river Aisne. Do you think your division could effect its capture?"

Studying the map closely, General Lejeune said with quiet assurance that he was certain the Second Division could take it. He was directed to propose a plan for the assault, which would be begun in a few days. He did so. The battle of Blanc Mont Ridge was fought and won by the Second Division as a part of the French Fourth Army, and that signal victory was due largely to the military genius of Lejeune.

Setting forth on October 1st, the Americans that night relieved French troops in the front line near Somme-Py. Charging over desolated white chalky ground, scarred and shell-pocked by years of artillery fire—a maze of mine craters, deep trenches and concrete fortifications, the Second Division cleaned up Essen Hook, and captured Blanc Mont Ridge and St. Etienne —all in the days from October 3 to 9. "This victory," the official report stated, "freed Rheims and forced the entire German Army between that city and the Argonne Forest to retreat to the Aisne."

Writing to Marshal Foch, General Gouraud proposed a special citation of the Division, stating:

> The Second Infantry Division, United States, brilliantly commanded by General Lejeune, played a glorious part in the operations of the Fourth Army in the Champaigne in October, 1918. On the 3d of Octo-

ber this Division drove forward and seized in a single assault the strongly entrenched German positions between Blanc Mont and Medeah Ferme, and again pressing forward to the outskirts of St. Etienne-a-Arnes, it made in the course of the day, an advance of about six kilometers.

It captured several thousand prisoners, many cannon and machine-guns, and a large quantity of other military material. This attack, combined with that of the French divisions on its left and right, resulted in the evacuation by the enemy of his positions on both sides of the River Suippe and his withdrawal from the Massif de Notre Dames des Champs.

Ordered to participate in the Argonne-Meuse operation, the Second Division marched ankle deep in mud more than a hundred kilometers, four days with but one day of rest. On November 1st, following a day of terrific barrage, the Division "jumped off" for its final operation of the war, which did not end until the morning of the armistice, when it was firmly established on the east bank of the Meuse. "It was so placed in the battle line," said the General Headquarters orders, "that its known ability might be used to overcome the critical part of the enemy's defense." The salient feature of the plan of attack was to drive a wedge through Landres-et-St. Georges to the vicinity of Fosse. If successful, this would break the backbone of the enemy and compel retreat beyond the Meuse. The Second Division accomplished the desired result on the first attack. "This decisive blow," said the official report, "broke the enemy's defense and opened the way for the rapid advance of the Army." The commander of the Fifth Army Corps wrote:

> The Division's brilliant advance of more than nine kilometers, destroying the last stronghold on the Hindenburg line, capturing the Freya Stellung, and going more than nine kilometers against not only the permanent but the relieving forces in their front, may justly be regarded as one of the most remarkable achievements made by any troops in this war.

During the night of November 3rd, in a heavy rain the division passed forward through the forest eight kilometers in advance of adjoining regiments, and within two days again advanced and threw the enemy in its front across the Meuse. The next morning at 6 o'clock it attacked and seized the German defense position on the ridge southeast of Vaux-en-Dieulet. On

the night of November 10th heroic deeds were done by heroic men. In the face of heavy artillery and withering machine-gun fire, the Second Engineers threw two bridges across the Meuse and the first and second battalions of the Fifth Marines crossed unflinchingly to the east bank and carried out their mission. "In the last battle of the war," said an order of the Second Division, "as in all others, in which this division has participated, it enforced its will on the enemy." Of this achievement the commanding general of the Fifth Army Corps said: "This feat will stand among the most memorable of the campaign."

"On the eleventh hour, the eleventh day of the eleventh month of the year 1918," Brigadier General Neville, commanding the Marine Brigade, in an order reviewing its great record closed with these words: "Along the fronts of Verdun, the Marne, the Aisne, Lorraine, Champagne, and the Argonne, the units of the Fourth Brigade Marines have fought valiantly, bravely, decisively. It is a record of which you may all be proud."

Shortly after the armistice, General Lejeune was ordered to proceed to Germany. Stationed at Coblenz, for months his division was a part of the Army of Occupation. I had the honor of reviewing the division on the heights of Vallendar, near the junction of the Moselle and Rhine rivers, and to note that its discharge of duty in Germany was in keeping with the glorious record it had made in war. "Your brilliant exploits in battle," said General Pershing in a general order to the Second Division, "are paralleled by the splendid examples of soldierly bearing and discipline set by your officers and men while a part of the Army of Occupation."

The Marines and their comrades of the Second Division were received with distinguished honor upon their return to the United States, President Wilson reviewing the men as they passed the White House to receive the heart-felt applause of a grateful people. The Secretary of War in a letter to the Secretary of the Navy, upon their return, wrote: "The whole history of the Brigade in France is one of conspicuous service. Throughout the long contest the Marines, both by their valour and their tragic losses, heroically sustained, added an imperishable chapter to the history of America's participation in the World War."

This mere outline of the outstanding fighting history of the Marines in France, tells only a small portion of what was done by the "Devil Dogs," as these Soldiers of the Sea were called by the Germans. Overseas the largest army concentration camp was Pontanezen at Brest. It was placed under the command of Brigadier General Smedley D. Butler, who organized, trained and carried over the Thirteenth Regiment of Marines. Approximately 1,600,000 men passed through that camp. It was one of the biggest jobs in France and General Butler performed the difficult duty with ability and satisfaction. The citation for an Army Distinguished Service Medal said of him: "He has commanded with ability and energy Pontanezen Camp at Brest during the time in which it has developed into the largest embarkation camp in the world. Confronted with problems of extraordinary magnitude in supervision, the reception, entertainment, and departure of the large numbers of officers and soldiers passing through this camp, he has solved all with conspicuous success, performing services of the highest character for the American Expeditionary Forces." After his return to America General Butler was made commandant of the chief Marine training camp at Quantico, Va.

Thirty thousand Marines were sent overseas to join the American Expeditionary Forces. When, in May, 1917, I tendered the Marines for service with the land forces abroad, there was objection on the part of some high ranking officers of the Army. But Secretary Baker, with the breadth that characterized him in the conduct of the war, accepted the tender, and the Fifth Regiment, under command of Colonel (afterwards Brigadier General) Charles A. Doyen, sailed on June 14 with the first expedition sent to France. The Sixth Regiment and Sixth Machine Gun Battalion followed later, and the Fourth Brigade of Marines was organized in October, as a part of the Second Division, which General Doyen commanded until relieved by Major General Omar Bundy, on November 8. General Doyen continued at the head of the brigade until ill health compelled him to relinquish his command on May 9, 1918.

The fighting ability which distinguished the Marines in France was the natural result of training and experience, the "spirit of the corps" with which they were instilled. When

war was declared there were only 511 officers, commissioned and warrant, and 13,214 enlisted men in the Marine Corps, which eventually contained 2,174 commissioned and 288 warrant officers, 65,666 enlisted regulars, 6,704 reserves and 269 female reservists—a total strength of 75,101.

Recruiting, training, equipment and supply of this large force was a task without parallel in the history of the Corps. It was conducted with an energy and ability that reflected the utmost credit upon Marine Corps Headquarters—Major General George Barnett, Commandant; the Assistant Commandants, first General John A. Lejeune, afterwards Brigadier General Charles G. Long; Brigadier General Charles H. Lauchheimer, Adjutant and Inspector; Brigadier General George Richards, Paymaster; Brigadier General Charles L. McCawley, Quartermaster; and others on duty at posts and in the field.

What they did in France was only one phase of the operations of the Marines. They were employed in practically every area in which the Navy operated—on battleships in the North Sea, on cruisers in the Asiatic; in Haiti, Santo Domingo and Cuba, and the isles of the Pacific. In fact, they claim the honor of firing the first shot of the war in the far distant island of Guam, where a Marine fired on a motor-launch which was trying to get to the German ship *Cormoran* with the news of the declaration of war before an American naval officer could reach that vessel and demand its surrender. That was the only German vessel in our territorial waters which we did not get. Her crew blew her up, and a number of her officers and men went down with the vessel.

Wherever they were, these Soldiers of the Sea, upon whom Uncle Sam has called so often when he had a duty to perform anywhere in the world—these men who, in many conflicts, have been the "first to land and first to fight"—served well and added fresh laurels to those so often won in the long history of the Corps. They may be pardoned for singing with a will their marching song:

> If the Army and the Navy ever look on Heaven's scenes,
> They will find the streets are guarded by United States Marines.

CHAPTER XIX

THE ANSWER TO THE 75-MILE GUN

GERMAN LONG-DISTANCE FREAK STOPPED BOMBARDING PARIS WHEN NAVAL RAILWAY BATTERIES ARRIVED—MANNED BY NAVY CREWS, HUGE 14-INCH GUNS OPERATED WITH FRENCH AND AMERICAN ARMIES—ADMIRAL PLUNKETT IN COMMAND—MOST POWERFUL ARTILLERY USED BY ALLIES ON THE WESTERN FRONT.

"PARIS bombarded!" was the news that shocked the world on March 23, 1918. Two days before the Germans had begun their great drive for the Channel ports. Their armies to the north were breaking through the Allied defenses, taking one position after another. But their nearest lines were nearly seventy miles from Paris. No gun known would shoot half that distance. How could they be shelling the French capital?

That was what mystified the Parisians. Falling out of a clear sky, the missiles fell, bursting in the streets. Aeroplane bombs, was the first thought, for Paris was used to aerial raids. But these were undeniably shells, not bombs, and there were no aeroplanes in sight. And they continued to fall with painful regularity. Arriving at 15-minute intervals, it was found that at least 21 shells had fallen that day. They were not huge, weighing about 260 pounds, but they were large enough to do considerable destruction, and to kill people in streets, squares, and markets.

For a week they kept falling, and then occurred a tragedy that shocked not only Paris but the whole Christian world. It was Good Friday, and the cathedrals and churches were crowded with worshipers. As the congregation—women and children, and men too old to fight—prayed in the Church of St. Gervais, a shell crashed through the roof of the building, and exploded. Seventy-five persons were killed, of whom 54 were women—and five of these were Americans. Ninety others were injured.

In all Christian lands people were aghast at this slaughter of the defenseless. Indignation was stirred all the more by the knowledge that this bombardment was wholly without military value. Its entire object was to terrorize the civilian population. It was only another example of German frightfulness.

After long search by aircraft it was discovered that shells were coming from the forest of Gobain, near Laon, nearly 75 miles from Paris. There, inside the German lines, was located this new instrument of warfare, the latest surprise sprung by the Germans and one of the most sensational of the whole war. Worst of all, the Allies had no effective reply. Aeroplane bombing proved ineffective, and the Allies had no guns which could reach it.

For five months Paris endured this menace. No one knew where the shells would fall next, or who would be the victim. The city, however, went about its business and kept up its courage. But here in America there was being prepared the Nemesis of the Teuton terror.

The United States Navy was at that very time building long-range guns that, while not capable of firing such great distances as the German cannon, were far more powerful and effective in action. Germany's gun was a freak, merely able to hurl comparatively small shells seventy miles or more. Huge projectiles weighing 1,400 pounds were fired by our guns, and wherever they hit, everything in the vicinity was smashed.

Elaborate emplacements were required for the German gun, taking considerable time to construct. Their cannon could be fired from only one point. The American guns were on railway mounts, and could be rapidly moved from place to place, wherever they were needed. Only a few hours were required to get them into position. In fact, if necessary, they could fire from the rails.

Five of these immense naval railway batteries were built and sent to France. When the first battery arrived, on its way to the front, the Germans stopped shelling Paris. Their long-distance gun was hastily withdrawn, and it never fired another shot.

What these batteries saved us from can be judged from Admiral Sims' statement that, encouraged by the shelling of Paris,

the Germans were preparing to conduct long-distance bombardments at various points along the front. They were taking large guns from battle cruisers, to be mounted where they could bombard Dunkirk, Chalons-sur-Marne, Nancy and other cities. Sixteen huge rifles, it was reported, had left Kiel for this purpose. But, so far as known, they never got into action. The Germans never carried out their plan to scatter that terror to the cities of France.

These railway batteries, the largest ever placed on mobile mounts, proved an effective answer to the Germans. They were distinguished not only by what they prevented, but what they accomplished in action. Engaged with the French and American armies from September 6th until hostilities ceased, this was the most powerful artillery used by the Allies on the western front.

The guns were of the largest type on our dreadnaughts—14-inch, 50 caliber, capable of throwing a 1,400-pound projectile 42,000 yards, nearly 25 miles. In action, the firing was usually from 18 to 23 miles.

Operating at various points along the lines from Laon to Longuyon, these batteries tore up enemy railways, cutting important lines of communication; blew up ammunition dumps and bases, and scattered destruction far in the rear of the German trenches. Manned entirely by Navy personnel, the force was under command of Rear Admiral Charles P. Plunkett.

Each battery comprised an entire train of 15 cars, made up as follows:

1 Locomotive
1 Gun car
1 Construction car
1 Construction car with crane
1 Sand and log car
1 Fuel car
1 Battery kitchen car
2 Ammunition cars
3 Berthing cars
1 Battery headquarters car
1 Battery headquarters kitchen car
1 Workshop car

Thus each battery was self-sustaining, carrying not only its own ammunition, fuel and food, but also machinery and mechanics for making repairs. The total weight of the gun-car was about 535,000 pounds, the gun, breech mechanism, and yoke weighing 192,500 pounds. The five batteries, including the staff train of eight cars, comprised 6 consolidation locomotives and

tenders (tractive power 35,600 pounds), 5 gun-cars and 72 auxiliary cars.

The first mount, complete with its huge gun, rolled out of the shops on April 25, 1918, less than a month from the time of the Good Friday slaughter in the Paris church. Tested at Sandy Hook, N. J., five days later, it proved a complete success, hurling its immense projectiles more than twenty-five miles.

If our guns had been built in Paris we could have had them at the front in three days. They were made to move by rail, and to be ready for almost immediate action. But they had to get to France first, and the difficulties of fighting a war 3,000 miles away were impressed upon us by this necessity for transporting them. No ship was big enough to carry one of them set up. Each had to be taken to pieces before loading. The last of the mounts was completed May 25—a new record for quick construction. But getting a ship to take them over was no easy task.

The first ship assigned was so badly battered up on the incoming voyage that it had to go into dock for repairs. The second ship, the *Texel,* was sunk by a U-boat near our coast. It was June 29 before the first of the battery transports, the *Newport News,* heavily laden with material, sailed for France, arriving at St. Nazaire July 9th.

Setting up these immense batteries was a trying job. Facilities at St. Nazaire were very limited for the work of assembly. Lieutenant Commander D. C. Buell, an officer of railroad experience, who as inspector had watched the building of the mounts, was sent to France. Admiral Plunkett and his force were on hand when the major part of the material arrived. All set to work, and in a little more than two weeks the first train was assembled.

Then arose another complication. When the French saw the size of these mounts, they were afraid their immense weight would crush the rails and probably break through or weaken bridges. The railroad authorities were unwilling for them to move over their lines. For a time it seemed as if they would never get to the front. But Admiral Plunkett and his aids had more confidence than did the French. The first train, which had been completed a week before, left St. Nazaire August 17th.

It proceeded slowly and all doubts were removed when it rode the rails and passed over bridges without the slightest trouble.

The news of its coming had somehow spread through France and its progress toward Paris was like a triumphal procession. All along the route crowds assembled, cheering the American naval gunners "going to land," and girls decorated the gun with flowers. A second battery was on the way before the first arrived. Camouflage was no concealment. Everybody knew the big American cannon were on the way. And the Germans must have learned it, too. For, when the battery got near the front, the German long-distance gun was hurried away.

These two batteries were to proceed to Helles-Mouchy, and from there search out the hidden enemy in Gobain. But when the batteries reached this position, it was found that the German terrifier was gone, leaving only its emplacement to mark the spot at which it had so long operated.

Battery No. 1 proceeded to the French proving ground at Nuisemont, where firing tests were made with complete success. Battery No. 2 proceeded to Rethondes, in the forest of Compiegne, to fire upon an ammunition dump at Tergnier, but after one shot, fired September 6, ceased firing, as the French captured the village. Battery No. 1 was taken to Soissons where, on September 11, position was taken near St. Christopher Cemetery. No. 2 proceeded to Fontenoy-Ambleny.

While these two batteries were operating, work was continuing on the remaining three. Trains No. 3 and 4 left St. Nazaire September 13, followed by No. 5 on the 14th. They arrived at the railroad artillery base, Haussimont, on September 23rd, 24th and 26th, respectively.

Weather conditions preventing observation by aeroplane or balloon, it was decided to proceed without observation, so on September 14th Battery No. 2 fired ten rounds at an ammunition dump in Besny-Loisy, just west of Laon. No. 1 on September 28th fired into the German lines at Laon, putting over 47 rounds between 1 and 5:30 p. m., at a range of 34,000 yards. The target was the railroad yards. One hundred and twelve rounds were fired against this objective between September 28th and October 2nd. Battery No. 2 fired twelve rounds into Besny-Loisy on September 15th.

The Germans began retreating from Laon while this long-range bombardment was in progress, leaving these targets in the hands of the Allies. It was found that, though the batteries had only maps to use in directing the firing and without aeroplane observation, the shots in nearly all cases were effective hits. One 14-inch shell wrecked a three-track railroad line, making a gap of 100 feet, tearing up rails, shattering ties and blowing a crater in the road-bed. Another projectile struck a moving picture theater during a performance, killing 40 men outright and severely wounding sixty. Two other shells struck this theatre, completely demolishing it and several other surrounding buildings. A freight train on a siding had been struck, and one of the cars was lifted from the tracks and thrown a distance of thirty feet.

Time and again enemy aeroplanes bombed the vicinity of these batteries. Shells were continually passing overhead. On October 5th, at 4:30 p. m., a shell burst directly over Battery No. 1, followed by three other high bursts. A succession of shells followed. One struck only 16 feet from the gun, fragments hitting the sideplates and breaking the casting of the gas engine support, but doing no further damage.

Battery No. 2 was taken to Flavy-le-Martel, arriving October 8th. No. 1 remained at Soissons until October 24th, firing in all 199 rounds from the same pit foundation. After the capture of Laon, the target was, on October 2, shifted to a point north-east of that town, where 87 rounds were fired at ranges from 28,000 to 36,660 yards.

Having performed so satisfactorily in the vicinity of Soissons with the Tenth French Army, Batteries No. 1 and No. 2 were ordered to join the First American Army. They arrived at Nixeville, just south of Verdun, October 28th. Batteries 3, 4 and 5, already in that region, had fired several rounds at open fields in the German lines near the targets selected, in order to obtain aviation photographs and correct the range. On the 30th and 31st six rounds per gun were fired each day, the two guns at Thierville firing at an aviation field south of Longuyon and the two batteries at Charny firing at points near Montmedy. Battery No. 2 bombarded the railroad yards at Montmedy with 43 rounds on November 1st and 2nd.

As General Foch was preparing for a big offensive east of Metz, the French requested that two of the naval batteries be assigned to take part in this operation. Accordingly Nos. 1 and 2 were assigned to the French, while the remaining three remained at Thierville and Charny to keep up the bombardment of Montmedy and Longuyon. No. 1 proceeded via Champigneulles, arriving at its firing position, in the forest of Velor, November 6th, its objective being Sarrebourg. Leaving Charny November 3rd, Battery No. 2 reached Moncel-Lunéville, in the forest of Mondon, November 9th, having orders to fire on Bensdorf. Both targets were important German railroad centers. But the signing of the armistice, on the 11th, put an end to the French offensive for which huge preparations had been made.

Battery No. 3, which was shifted from Thierville to No. 2's position at Charny, on November 1, fired at the Longuyon railway yards. No. 4 fired 23 rounds into Montmedy, and No. 5, 44 rounds at the transportation centres of Longuyon. The next day Nos. 3 and 5 each fired 25 rounds at Longuyon and No. 4, 20 rounds at the Montmedy railroad. On account of the enemy's activities at Louppy and Remoiville, No. 4 November 3, fired 25 rounds at a large ammunition dump and at the lower railroad dump at Montmedy. On November 4, Battery No. 4 again took up position at Thierville. No. 3 opened fire on Louppy and Remoiville on the morning of November 4, firing 44 rounds at the two targets. Twelve rounds were also fired at Montmedy.

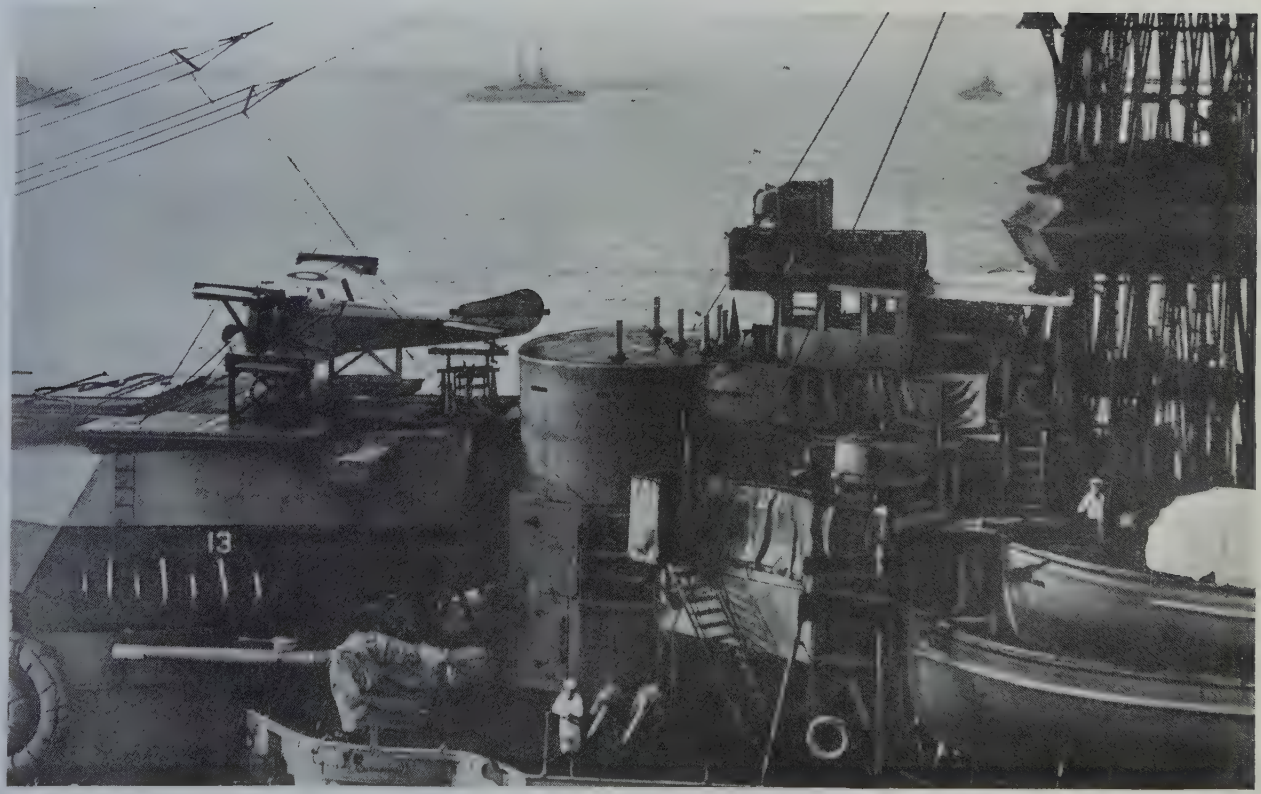
The naval guns were last fired on November 11th, batteries 4 and 5 sending five shells each into Longuyon. The last shot was fired by No. 4, from Charny, at 10:58:30 a. m., ninety seconds before hostilities ceased.

While direct observations could not be obtained in the Verdun sector, there was evidence from the enemy of the effectiveness of these guns. On November 5, the southern part of Montmedy, which was under bombardment, was reported on fire. Later a German prisoner stated that the firing on Montmedy had caused a great deal of damage, one shell which landed in the railway yards, killing all the Germans in two coaches.

The batteries at Charny and Thierville were repeatedly shelled and bombed. On October 30th, when the enemy was

NAVAL RAILWAY BATTERY FIRING FROM THIERVILLE UPON LONGUYON

Insert Rear Admiral Charles P. Plunkett, commanding the Naval Railway Batteries in France.



ON THE TURRET PLATFORM OF A BATTLESHIP

A naval airplane is mounted, on the turret platform, ready for the call to the sea.

shelling crossroads between No. 2 gun and its berthing cars, three American engineers working on the track near by were killed, and the headquarters car and one berthing car derailed. On the same day five soldiers were killed and others wounded by shells which fell around Battery No. 4 at Charny. Three men of Battery 4 were wounded by shell fire on October 28th, one of these, A. P. Sharpe, seaman first class, dying the next day in the hospital at Glorieux.

One of the most important services rendered by the naval batteries was the shelling of the railroad running through Longuyon and Montmedy, the only line (except one running far to the north through Belgium), by which the Germans could bring troops to Sedan. Though some shots fell several hundred yards beyond the ranges calculated from the range table, the railroad line and yards were struck frequently, and traffic stopped completely, not only during the actual firing, but from six to ten hours each day after the firing ceased.

General Pershing, in his report of November 20, 1918, said:

> Our large caliber guns were advanced, and were skilfully brought into position to fire upon the important lines at Montmedy, Longuyon, and Conflans. On the 6th a division of the First Corps reached a point on the Meuse opposite Sedan, 25 miles from our lines of departure. The strategical goal which was our highest hope was gained. We had cut the enemy's main line of communications, and nothing but surrender or an armistice could save his army from complete disaster.

Though these batteries fired a total of 782 rounds and were under enemy shell-fire repeatedly, there was no material damage to guns, mounts or equipment, which met every condition imposed. The total rounds fired per gun were: No. 1, 199; No. 2, 113; No. 3, 236; No. 4, 122; No. 5, 112.

In France the naval railway batteries operated as five separate and independent units, all under command of Admiral Plunkett. His principal assistants were Lieutenant Commanders G. L. Schuyler and J. W. Bunkley. The commanders of the batteries were: No. 1, Lieutenant J. A. Martin; No. 2, Lieutenant (junior grade) E. D. Duckett; No. 3, Lieutenant W. G. Smith; No. 4, Lieutenant J. R. Hayden; No. 5, Lieutenant J. L. Rodgers.

The use of these guns at the front was first proposed in

November, 1917. Impressed by the Allies' lack of long-range artillery, the Chief of the Bureau of Ordnance pointed out that a number of 14-inch guns at the Washington Navy Yard were available and suggested that they might be mounted on the Belgian coast to reply to the powerful artillery the Germans were using against Dunkirk. Upon consideration, it was decided that it was practicable to place these naval guns on railway mounts, though they were heavier than any mobile artillery that had been built by any country. On November 26, 1917, I instructed the Bureau of Ordnance to proceed with the building of five of these mounts, with complete train equipment. Though many problems had to be solved, the naval gun factory completed the designs within two months, and the 136 standard drawings and 36 sketches required were ready to submit to bidders on January 26, 1918.

With the numerous other war requirements, which taxed steel and locomotive plants to their capacity, it seemed, at first, almost impossible to secure the building of the mounts, locomotives and cars required. But bids were secured, accepted on February 13, 1918, and the contractors pushed the work so energetically that the first mount was completed 72 days from the award of the contract. Scheduled for delivery on May 15, it was completed April 25. The last mount, scheduled for June 15, was completed May 25. The first gun and mount complete arrived April 27 at Sandy Hook, N. J., where it was subjected to severe firing tests. The locomotives and auxiliary cars were completed June 1, and shipment overseas was begun. Credit for this speedy construction is due contractors as well as naval officers, and particularly Mr. Samuel M. Vauclain, president of the Baldwin Locomotive Works, who took an intense personal interest in the whole undertaking.

While construction was under way, the Navy had been selecting and training the personnel, 30 officers and 500 men, required to man and operate the batteries. Men were carefully chosen—some 20,000 volunteered for this detail—and were given an intensive course of training.

The approximate cost of the five mounts, locomotives, cars, spare parts and ammunition was $3,337,970.

As other artillery could accomplish with less expenditure of

ammunition and expense the results desired at the shorter ranges the naval guns were used entirely for strategical purposes and were fired at ranges between 30,000 and 40,000 yards, shelling objectives that less powerful guns could not reach. The ammunition supply which was gauged by the estimated "life" of the gun—that is, the number of times it could fire with accuracy—consisted of 300 rounds for each gun, and this quantity proved adequate. Battery No. 3 made a record for guns of this size in firing 236 rounds without serious deterioration.

From beginning to end, this entire enterprise was so well planned and carried out, that we may well consider it one of the most successful operations in which the Navy ever engaged.

CHAPTER XX

THE NAVY THAT FLIES

NAVAL AVIATION WATCHED OVER SHIPS AND SEARCHED THE SEAS —FIRST OF U. S. ARMED FORCES TO LAND IN FRANCE—FOUGHT ENEMY AIRCRAFT FROM HELIGOLAND TO POLA—ATTACKED U-BOAT BASES IN BELGIUM—NAVAL AVIATORS, IN TRAINING AND SERVICE, FLEW FIFTEEN MILLION MILES.

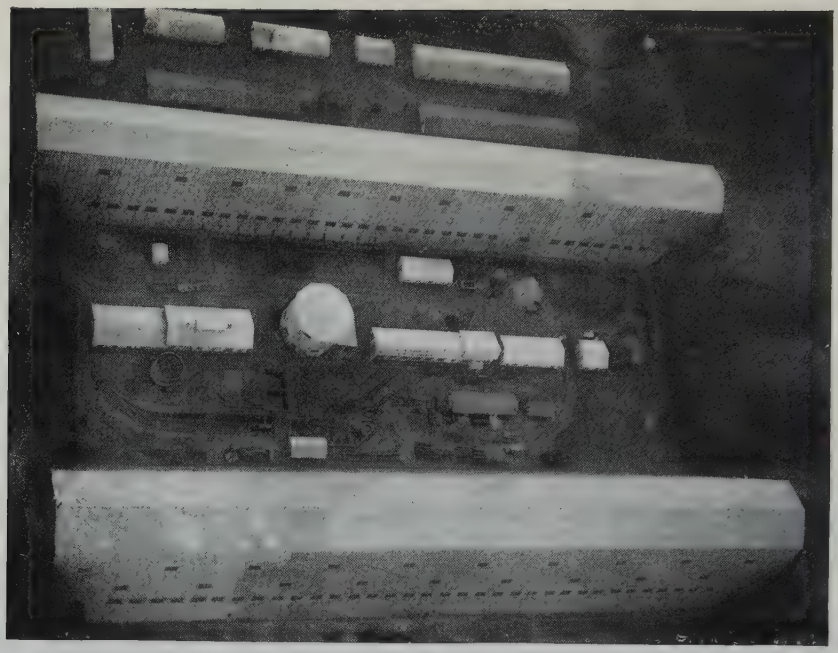
THE first of the armed forces of the United States to land in France were naval aviators—seven officers and 128 men, under command of Lieutenant Kenneth W. Whiting. One group, sailing on the *Neptune,* arrived June 5, 1917, at Pauillac, the port from which Lafayette sailed for America to join the struggling colonists in their war for independence. The other, on the *Jupiter,* reached St. Nazaire June 9, sailing through the very waters in which John Paul Jones operated in the Revolution. Eight miles up the river Loire lies Paimboeuf, where Jones in the *Ranger* arrived November 30, 1777. Fifteen miles away is Quiberon Bay, where the French, February 14, 1778, fired the first foreign salute to the American flag.

Naval aviation stations were erected at both Pauillac, which is on the Gironde river near Bordeaux, and at Paimboeuf, so the operations of America's flying navy in the World War were over the very waters where the name and fame of the first American navy were established 140 years before.

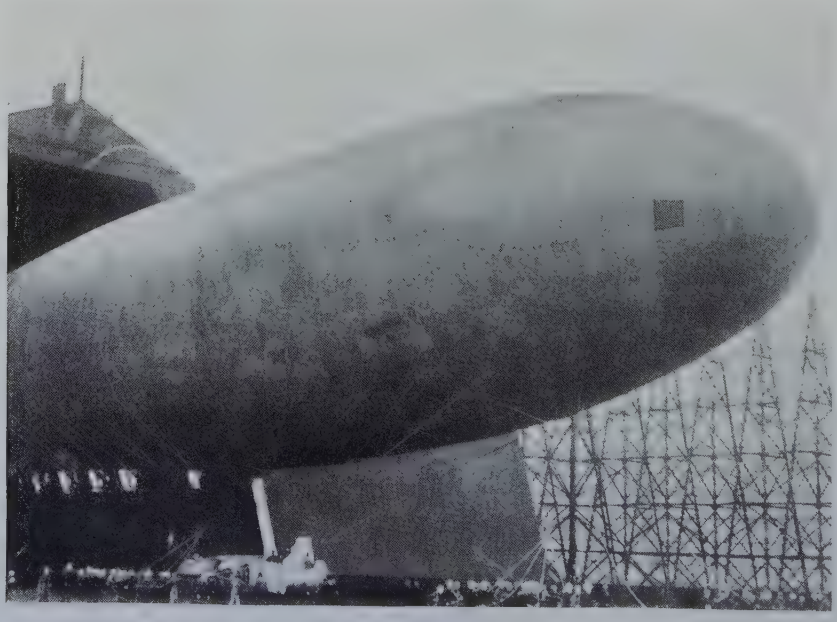
We had stations all along the coast of France—at Dunkirk, St. Ingelvert and Autingues, headquarters of the Northern Bombing Group; L'Aber Vrach, Brest, Ile Tudy, Le Croisic, Fromentine, St. Trojan, Treguier, Arcachon, La Trinite, La Pallice, Le Fresne, Oye, Guipavas, Paimboeuf, Pauillac, Rochefort, St. Ingelvert, and Gujan, with a training school at Moutchic.

In Ireland we had stations at Queenstown, Berehaven, Lough Foyle, Whiddy Island and Wexford; in England at East-

ASSEMBLING NAVAL AIRPLANES AT BREST



NAVAL AVIATION HANGARS AT GUIPAVAS



A NAVY "BLIMP" LEAVING HANGAR AT GUIPAVAS, FRANCE

leigh and Killingholme. We aided Italy in fighting the Austrians, with our training school at Lake Bolsena and an operating station at Porto Corsini, on the Adriatic, across from the Austrian naval base at Pola. Our aviators flew across the Alps and the Adriatic sea; they patrolled the waters along the French coast, protecting the vast Allied shipping going into and out of the French ports, and guarding the convoys of American troops, munitions and supplies. Our Northern Bombing Group bombed the German submarine bases and ammunition and supply depots in Belgium. Operating with their British comrades, our aviators flew over the North Sea and battled with German aircraft over Heligoland Bight, almost within sight of the home bases of the German fleet. They took part in the North Sea patrol in connection with the movements of the British Grand Fleet, and those assigned to the British stations at Felixstowe and Portsmouth had a part in the famous Dover Patrol that kept clear the road from England to France.

The United States Navy had 44 aviation stations and units in Europe, with a record of 5,691 war flights, covering a distance of 791,398 miles. This does not include 18,000 flights that were made in training. Forty-three submarines were attacked from the air, our aircraft being credited, according to the records of Naval Aviation, with sinking two U-boats, with probably sending down two more, and damaging others. An even more striking evidence of efficiency was the fact that during the last ten months of the war no surface craft convoy protected by American naval aircraft in the war zone was successfully attacked by an enemy submarine.

Attacking the German U-boat bases, Bruges, Zeebrugge, Ostend, and the airdromes and air stations and other enemy establishments in Flanders, the Northern Bombing Group, which operated in connection with the British Royal Air Force, dropped more than 155,000 pounds of bombs, destroying hangars and other structures, blowing up ammunition dumps and now and then bringing down a kite balloon, spreading such havoc that it shook the nerve of the German crews that handled the Teuton aircraft in western Belgium.

Our first naval "ace," Lieutenant David S. Ingalls, was attached to this Northern Bombing Group, being first assigned to

Royal Air Force Squadron No. 213. His spectacular performances began on August 11, 1918, when, in company with a British officer, he shot down a two-seater machine in a running flight over the German lines. The night of the 13th, flying over the German airdrome at Varsenaere, and dropping to a point where his plane nearly touched the ground, he sprayed 450 rounds from his machine-gun into the wondering Teutons, who were making desperate efforts to get him with their anti-aircraft guns. Swinging in a wide circle, he again swooped down on the hangars and let loose four bombs in the midst of the camp, putting out searchlights, scattering Germans and mussing up things generally. At the Uytkerke airdrome he repeated the stunt he worked at Varsenaere, firing 400 rounds into the German hangars, and dropping bombs upon the Fokkers grouped on the field below.

On this raid, which occurred September 15, Ingalls led a formation of five in a wing of twenty biplanes. Returning from Uytkerke, he sighted an enemy two-seater Rumpler going west from Ostend. With Lieutenant H. C. Smith, of the British Air Force, Ingalls turned out of formation, swung in over the shore, and attacked. The Rumpler turned and dived toward Ostend, the Camels following. Firing 400 rounds from ranges of fifty to 200 yards, they chased the enemy plane to the Ostend piers, when the Rumpler went down out of control, burst into flames and crashed just off the beach.

Three days later Ingalls made one of the most spectacular flights on record. In company with two English pilots, he sighted a kite balloon at 3,500 feet elevation near La Barriere. Crossing the coast line, they attacked. The German kite reeled under the rapid fire, and as it fell, its two observers opened up their white parachutes and jumped. Ingalls gave the balloon another spraying with bullets and it burst into flames. Falling, the blazing balloon landed on a hangar. There was an explosion, followed by a fire that destroyed the entire station. The flames were visible as far as Nieuport.

On September 22, in company with four other machines, Ingalls flew all over Flanders, committing depredations on German hangars, and ammunition trains. Four bombs were dropped on the ammunition dump at Handezeame, blowing up a

string of wagons loaded with shells. Flying over Wercken, bombs were landed on a hut filled with explosives, setting it on fire. Swinging around over the railway station at Thourout, where the Germans had an enormous supply dump, two more hits were made. On the way back, his fourth trip for the day, he bombed a horse transport, and he and his companions by bombs and machine-gun fire killed or wounded some twenty-five Germans and thirty-five horses.

With three other machines, Ingalls was, on September 24, flying over the lines at 16,000 feet elevation, when twelve Fokkers were seen approaching. Though outnumbered, the speedy Allied planes quickly broke up the German formation. The famous British Captain Brown, of Squadron No. 213, swung into and gunned a Fokker after a thrilling high bank, and the German fell to earth three miles below. Another Fokker had got on the tail of one of the Allied machines and by a well-aimed shot punctured its gasoline tanks. Ingalls came to the rescue, fighting off the enemy and in a few minutes shooting him down. The fourth plane was hard at it, too, succeeding in shooting down another Fokker, after following it down to within a few feet of the ground. Thus three Fokkers were accounted for in a few minutes.

On another occasion, Ingalls, single handed, attacked six biplanes, driving down one of them and eluding the five pursuers. The first of October he engaged in three successive raids in one day. His second point of attack was a large farm building at Cortemarck, used as a shelter for troops. More than 200 Germans were gathered there. Crashing through the roof, a bomb dropped by Ingalls exploded in their midst, dealing death and destruction.

I wish it were possible to recount all the daring deeds performed by our Navy and Marine Corps aviators, who with the British and on their own engaged in constant attacks on the German bases in Belgium, but Ingalls' exploits are enough to give an idea of the work performed by this Northern Bombing Group. And all this was "land duty," a task seldom assigned to navies.

The Navy's "regular job," far the greater part of its work, was patrolling the long coast lines, watching for submarines,

and furnishing aerial escort for the convoys of troop, supply and merchant ships that moved in a constant stream to and from European ports. Covering vast areas of water, they flew hundreds of thousands of miles, and they were always on the job.

Though the U-boats usually "ducked" when a seaplane or dirigible balloon was sighted, aircraft often managed to spot them, and took part in some exciting encounters. One remarkable engagement, a gunfire fight between seaplane and submarine, took place off Dunkirk on August 13, 1918.

Four seaplanes left their station for a routine flight in connection with the Dover Patrol. Eight miles off the coast, between Calais and Dunkirk, Ensign J. F. Carson, one of the pilots, sighted a large submarine, with no identification marks, speeding on the surface in the direction of Holland. Carson challenged it by firing a recognition signal. The U-boat opened fire on the seaplane with shrapnel from its forward gun, firing five shots.

Carson nosed his plane down, his machine-gunner firing on the submarine. As it came into bombing position, he dropped a bomb which hit the vessel, and as it exploded two of the gun crew fell, apparently badly wounded. The U-boat cleared its decks and dived. Just as it plunged beneath the surface, another seaplane came into position and dropped two bombs. One exploded in the splash where the submarine plunged, and the second slightly forward of that point in the curving line of the descending boat. Four minutes later the submarine again came to the surface. But before Carson could get his plane in position for bombing, it again submerged, sliding beneath the waves stern foremost.

Carson unloaded his bombs on the moving wake, and put back to the station for more ammunition. When he returned oil covered the water and a lone life preserver floated near the spot where the submarine went down.

The value of coöperation between aircraft and vessels was strikingly demonstrated in the sinking of the U-boat called "Penmarch Pete," which was, according to reports received, destroyed by American seaplanes from the Ile Tudy Station and the U. S. destroyer *Stewart,* on April 28, 1918. Two planes left Ile Tudy that morning, one piloted by Ensign K. R. Smith,

the other by Ensign R. H. Harrell, on convoy duty. Zigzagging along the coast nearly due west, at 11:30 o'clock they picked up a convoy of twenty ships heading south, six miles northeast of the Pointe de Penmarch. Heavy fog kept the planes at a low altitude and in the course of maneuvers about the convoy, a stream of air bubbles, denoting the wake of a submarine, was sighted by both planes. Smith descended close enough to the surface to distinguish a large oil patch. He dropped two bombs, the first being apparently a direct hit, and the second within ten feet of it. Dropping a phosphorus buoy to mark the location, Harrell sent down a correspondence buoy in the vicinity of the *Stewart,* then off the flank of the convoy. The *Stewart* speeded to the spot, sighted a dark object in the water, and dropped a succession of depth-bombs. "These bombs were dropped so close to the submarine, one on each side and within fifty feet of it, and the force of the explosion was so great," reported Lieutenant Commander Haislip, her commanding officer, "that it seems impossible that the submarine could have survived." For days there rose to the surface quantities of oil, which spread for miles down the coast. The U-boat was later identified as "Penmarch Pete," which had operated off the Pointe for months, and had destroyed over 100,000 tons of shipping.

Working with the British in the early stages of participation, our aviators made numerous flights over the North Sea, flying as far as the German coast. One of the first lost in action, Ensign Albert D. Sturtevant, of Washington, a Yale man, was second pilot of a machine that was attacked by ten German planes. Fighting against overwhelming odds, he went down in flames.

The first enemy plane destroyed by an American aviator was shot down in Heligoland Bight, almost in sight of the great German naval base, by Ensign Stephen Potter, of Detroit, March 19, 1918. His machine was one of a group sent out on long-distance reconnoissance. Nearing the German coast, they were attacked by Teuton planes, and a lively combat ensued. By dashing fighting, Potter succeeded in bringing down an enemy plane, which, set afire, fell to the water and burned up. Putting to flight other German machines, the force returned. It had travelled so far that six and a half hours steady flying

were required to reach the base on the British Coast. Six weeks later, April 25, Potter lost his life in a thrilling but unequal encounter over the North Sea.

While on patrol near Hinder Light, Potter and his companion sighted two German planes and, diving, closed in on them, firing at close range. Two more hostile planes appeared overhead, attacking vigorously. Four more enemy planes now appeared in V formation. Of seven Germans in action, four were attacking Potter, whose gun had jammed. Handicapped as he was, Potter began to zigzag. Again and again he dodged them, but at last the enemy machines got him on their broadside, and poured their fire into him. Bursting into flame his machine crashed down. Potter was last seen on the surface of the water in his burning plane, from which arose a cloud of smoke. Two of the enemy circled over, then joined the other five. When the smoke cleared away, there was not even a splinter of wreckage to show where this brave young aviator had gone down.

Lost in the English Channel, given up as drowned, Ensign E. A. Stone, of Norfolk, Va., was rescued after such an experience as few men survive. With his observer, Sub-Lieutenant Eric Moore, of the British Air Force, he clung for eighty hours, from Saturday morning to Tuesday night, without food or drink, to the underside of a seaplane pontoon.

Going out on patrol at 9 a. m., at 11:30 the engine "went dead," and the plane was forced to descend to the water in a heavy sea. At 2:30 the plane turned over, and the two men climbed up to the capsized pontoons. With no food or water, soaked and lashed by the waves, there they hung for nearly four days. They saw convoys in the distance, but none came to their assistance. Sunday night a mast-head light was sighted and the ship headed straight for the crippled plane. But when it got within a hundred yards, she put out her lights and turned away.

"She thinks we are Huns," said Moore.

"I hope she does," said Stone, "Then they'll send patrol boats out to get us. We couldn't be worse off if we were Germans."

A seaplane flew near them, on Monday afternoon, but, after

circling around, departed. It was not until 6 p. m., Tuesday, that they were rescued by a trawler which had been chasing a submarine.

Every machine from their seaplane base and those from a station on the French coast had searched continuously for the lost aviators as had all the patrols and destroyers in the area.

Ensigns K. W. Owen and J. Phelan, of our Killingholme station, had a somewhat similar experience May 16, near Flamborough Head. Disabled but still afloat, by both getting on one wing they swung the tail of the plane into the wind and managed to head her northwest, and coast about two knots an hour. Four days they kept this up, and then were drenched by a thunderstorm which damaged the wings and carried away their rudder. It was not until one o'clock that night that they sighted what seemed to be a boat in the distance. Using up their last cartridges, they sent a stream of "fireworks" from a Very pistol, but this did the work and in a few minutes a British destroyer drew alongside and took them aboard. They had had nothing to eat during the entire time, their only "provender" being thirty cigarettes. They had drifted 180 miles.

With an excellent training camp at Lake Bolsena and an operating station at Porto Corsini, on the Adriatic Sea, across from the Austrian naval base at Pola, our aviators did splendid service in Italy. Patrolling the Adriatic and bombing Austrian bases was their "regular job." But when, in the later months of the war, we began scattering over Austria American and Allied propaganda, to convince the Austrians of the hopelessness of their position, and which had a powerful effect in inducing Austria to give up the fight, aeroplanes were utilized to drop these thousands of leaflets and papers over cities. It was while on one of these flights that our aviators had an exciting experience and narrow escape.

On August 24, 1918, at 10:30 a. m. a group of five chasse and bombing machines left Porto Corsini for Pola, with a load of "literature." Formed in a flying wedge, the American machines soon came in sight of the high hills back of the Austrian coast, and a few moments later swept over Pola. At 11:20 the planes, at an altitude of 12,000 feet, unloaded their propaganda material over the city while the inhabitants, in

response to the siren and bell alarms, sought cover from the bombs they supposed were about to fall upon their heads. Anti-aircraft ordnance filled the air with bursting shrapnel and incendiary explosives, but the aim of the gunners was poor and none of our planes was hit.

No sooner had the documents been dropped than Ensign G. H. Ludlow, the leading pilot, saw five Austrian chasses and two seaplanes rise to give battle to the five Americans. Giving the signal to attack the Austrian machines, Ludlow dived toward them, immediately followed by Ensign Austin Parker and Ensign Charles H. Hammann.

The fight started at an elevation of 7,500 feet while the American planes were still in range of the anti-aircraft defenses. The Austrian planes were much faster than the bomber, which was in the direct line of fire. High explosives, shrapnel, pom-poms and incendiary shells burst all around it, and as the American chasses flew down to give aid, they in turn were subjected to the heavy rain of projectiles. But the Austrian planes were also in the range and the anti-aircraft gunners, fearing they would bring down their own machines, ceased fire, allowing the American bomber to make good its escape.

In less time than it takes to tell, Ludlow singled out the center machine of the enemy formation, giving it bursts from his machine-gun, while handling his controls with his knees. He then swung to the left after the second Austrian, Parker continuing the fight with the first. Hammann, in the meantime, engaged two other Austrians which had swung into action. At this juncture Parker's gun jammed, and he was obliged to pull out of the melee.

Ludlow had riddled one of the enemy, which fell to the harbor in a sheet of flame, but his own machine was badly damaged. The right magneto was shot away; the propeller shattered; the engine crank-case punctured, letting out the oil, which was ignited by a spark from the exposed magneto, and the plane burst into flames. Ludlow immediately slipped into a tail-spin, and the rush of air luckily extinguished the fire. One pursuer was thrown off the track, but the other followed him down to 1,500 feet above the water, the last burst from the Austrian completing the wreck of Ludlow's engine, while two bullets

passed through his leather helmet and grazed his scalp. Ludlow then went into another spin and, straightening out, made a safe landing on the water three miles west of Pola.

Then occurred a daring exploit. Hammann, by generalship and fighting ability, saved the whole squadron from further loss. With terrific bursts, he drove at the enemy, firing first on their tails and then on their flanks, and finally, with head-on drives, forced the remaining Austrian planes to their base. This gave the slow-going bomber an opportunity to make its final escape, allowed Parker and Voorhees to make good their distance and start for Porto Corsini, and relieved Ludlow from further immediate attack.

During a lull in the fighting Hammann swooped down on the surface alongside of Ludlow and his crippled plane. Austrian destroyers were on their way from the harbor to gather in both planes, and another squadron of Austrian aircraft was taking off for pursuit. Ludlow opened the photographic port of his machine, allowing the boat to flood, kicked holes in the wings to destroy buoyancy, and slipping overboard, swam to Hammann's waiting plane, and climbed up on the fuselage. The machine, a single seater, was so small that he had to sit under the motor, grasping the struts to keep himself from being swept off when it gathered speed. The extra load forced the hull into the choppy sea, where the bow, already damaged by gunfire, was broken in and one of the wing pontoons smashed.

The crippled and overloaded little plane at last managed to rise from the water. Hammann, by gunfire, sank the wreck of Ludlow's machine and, putting on all speed, made for Porto Corsini just in time to escape the leading Austrian destroyer and a squadron of seaplanes coming around the southern end of Brioni Island and making for him.

The plane made the sixty mile flight without mishap, but in landing the smashed-in bow took in enough water to nose the plane over, and, catching a wing tip in the heavy chop, the machine turned over on its back. The aviators extricated themselves from the wreckage, and were rescued by a motor boat from the station. Ludlow had a bad gash in his forehead, in addition to the scalp wounds received in the fight, and Hammann was badly bruised and strained. But both soon recovered and

took part in numerous subsequent actions, including raids over the front during the drive just prior to the Austrian collapse.

Before hostilities ended, U. S. Naval Aviation had 18,736 officers and men in service in Europe. The long flights along the British, French and Italian coasts, the patrols far out to sea, the combats with enemy aircraft and submarines form one of the most brilliant chapters of the war.

On this side of the water 24 naval aviation units were in operation, patrolling the coast from Nova Scotia to the end of Florida, with stations on the Pacific and Gulf, and one unit stationed in Panama guarding the canal. The Azores, that half-way station between America and Europe, was guarded by a detachment of Marine Corps aviators. In America our fliers on patrol flew 2,455,920 nautical miles; and advanced training flights, many of which were in the nature of patrols, reached the grand total of 10,949,340 nautical miles. The total flying by our naval aviators in America, the Azores and Europe was more than 15,000,000 miles, for a nautical mile is longer than a mile as measured on land.

Naval Aviation grew, during the war, to a force of approximately 40,000, as follows:

Officers—Qualified aviators, 1,656; student aviators, 288; ground officers, 891; student officers under training for commission, 3,881.

Enlisted men—Aviation ratings, 21,951; general ratings assigned to aviation duty, 8,742.

Marine Corps—Aviation officers, 282; Enlisted men, 2,180.

This force was equipped with 1,170 flying boats, 695 seaplanes, 262 land planes, ten free balloons, 205 kite balloons, and 15 dirigibles. Of this equipment 570 aircraft had been sent abroad, before the armistice.

Captain N. E. Irwin was Director of Naval Aviation, with offices in the Navy Department. Captain H. I. Cone was in general charge of our aviation activities in Europe. Construction and operation of air stations in France were under his supervision until August 1, 1918, when he moved to London, as head of the Aviation Section of Admiral Sims' staff. Then all our forces in France, except the Northern Bombing Group, which was commanded by Captain D. C. Hanrahan, were placed

under command of Admiral Wilson, Captain T. T. Craven, as aide for aviation, on his staff, being charged with all aviation matters.

Building more than forty stations in Europe, some of them of huge extent, was a big task in construction. Its accomplishment, under many handicaps and difficulties, reflects the utmost credit upon all concerned. Constructors and aviators displayed such energy and resource, that it was a current saying that, "Naval Aviation can do anything that comes to hand."

They created in a few months stations that, under ordinary circumstances, would have required years to build. Let me give one example illustrative of others. At the big air station at Killingholme, England, contracts for the buildings had been made, but it became evident soon after the arrival of our aviation personnel that unless we did the work ourselves that station would never be built in time to permit active operations or house the men in comfort. But Lieutenant M. E. Kelly, with a detail of 200 American blue-jackets, built in thirty days twenty-eight barrack buildings of brick and concrete, each twenty feet wide and sixty feet long. That is only one instance of hundreds of things done by this force in Europe.

The Navy erected its own aircraft factory at the Philadelphia Navy Yard, which was producing and shipping planes to Europe in the spring of 1918. This immense plant was of inestimable value in carrying out the program of aviation construction, which was pushed all along the line.

Though there was no specific appropriation for erecting an aircraft factory, this was considered so essential that an allotment of $1,000,000 was made for the purpose. I signed the order authorizing the erection of the plant July 27, 1917. Within ten days the contract was let. Naval Constructor F. G. Coburn was detailed as manager. Under his energetic direction, construction was pushed so rapidly that by October 17 the first buildings were up, considerable machinery installed and on November 2 the keel of the first flying boat was laid. The building was pronounced complete on November 20, only 110 days after the contract was awarded. That factory was enlarged until it covered forty acres, with buildings having 888,935 square feet of floor space. At the time of the armistice, there were 3,642 employees

engaged in constructing aircraft of the latest type. The value of its war-time output was more than $5,000,000.

Not only did the Navy build and put into operation hundreds of seaplanes, flying boats and other aircraft, but it originated and built the largest seaplanes in existence, the "NC" type, the first of which was completed before the armistice.

Few people seem to realize that these huge "NC" planes—the "Nancys" they were called—which became famous in the first flight across the Atlantic in May, 1919, were built for war use, and that the work of developing this new type was begun only five months after we entered the war. It takes a long time to develop a new type of such magnitude.

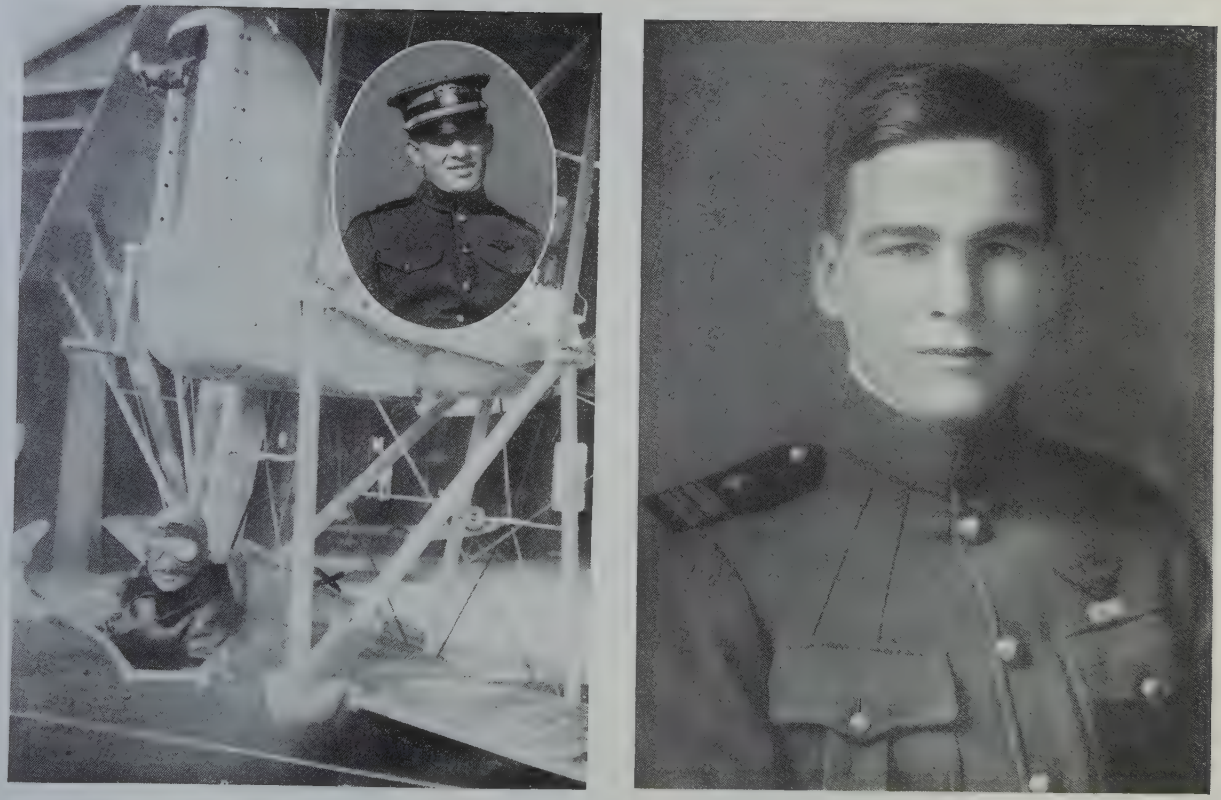
All nations recognized the need of larger seaplanes, able to cruise hundreds of miles and return without refueling. Shipping space was so valuable that taking to Europe the large numbers of planes the Army and Navy had contracted for was a serious problem.

The Chief Constructor of the Navy, Admiral Taylor, had often discussed these problems with me. One day in September, he sent for Naval Constructors G. C. Westervelt and J. C. Hunsacker. "I want a plane designed that will fly across the Atlantic," was the surprising task he assigned them. Admiral Taylor's daring idea aroused my warmest enthusiasm. He and his force began work at once. No flying boat of anything like that size and power had ever before been produced. There were all kinds of problems to be solved; numerous experiments had to be made concerning every detail. By the end of 1917 all the main elements of the design had been formulated, and early in 1918 the work of construction was begun. The NC-1 was completed by the first of October, and the first test flight made three days later. This was so successful that, on November 7, just before the armistice, she flew to Washington, where she was inspected, going thence to Hampton Roads and back to Rockaway.

Our dream of building a plane that would fly across the Atlantic had been translated into reality. Six months later the NC-4 made the first flight from America to Europe, from Rockaway, Long Island, to Nova Scotia, the Azores, Portugal and England, landing at Plymouth, the port from which, three centuries before, the Pilgrims had set sail for America.

PAUILLAC, NAVAL AVIATION STATION

Pauillac, on the Gironde River near Bordeaux, was one of the great assembly and repair bases maintained by the Navy.



FLIERS WHOSE EXPLOITS BROUGHT PRESTIGE TO NAVAL AVIATION

At the left, in his seaplane, is Lieutenant G. H. Ludlow, who was rescued, after his plane was disabled by enemy fire, by Ensign C. H. Hammann (inset). At the right is Lieutenant David S. Ingalls, first naval ace.

CHAPTER XXI

THE FERRY TO FRANCE

"N. O. T. S.," THE WORLD'S LARGEST CARGO FLEET—OPERATING 450 STEAMERS, NAVY HAULED MILLIONS OF TONS OF MUNITIONS, FOOD, FUEL AND SUPPLIES TO FORCES ABROAD—ONLY EIGHT SUNK BY U-BOATS OR MINES—"TICONDEROGA" TORPEDOED—DISAPPEARANCE OF "CYCLOPS" MYSTERY OF THE WAR.

"N. O. T. S." You may not recognize those initials, but every sailor on the Atlantic was familiar enough with them in 1918, for they stood for the largest cargo fleet on earth, under a single management—the Naval Overseas Transportation Service. No one had ever heard of it a year before. But before the end of hostilities 490 vessels, 3,800,000 deadweight tons, had been assigned to this service, and 378 were in actual operation, the remainder being under construction or preparing to go into commission.

If the war had continued through 1919 we would have needed, according to the estimates, at least 20,000 officers and 200,000 men for this service alone. The number might have gone well over a quarter-million. The Shipping Board and American yards were building ships at a rate never before approached. The schedule for 1918-19 contemplated the delivery of 1,924 vessels, the large majority of which were to be put into war service and manned by the Navy. Officers and men had to be recruited and trained months in advance, and this we were doing, to have the crews ready to get to sea as vessels were completed. They manned, in all, 450 cargo ships.

"N. O. T. S." was "The Ferry to France," carrying millions of tons of munitions, guns, food, fuel, supplies, materials to our army and naval forces abroad. Remaining in port only long enough to discharge their cargoes, make necessary repairs, and fill their bunkers with coal, its vessels plied steadily across

the Atlantic, to and from Europe, with the regularity of freight trains. Five tons of supplies a year were required for each soldier. Vast quantities of munitions, mountains of coal, millions of gallons of fuel oil; enormous quantities of steel, timber, concrete and other materials; food for civilian populations; locomotives, guns,—all these and a thousand other things were required, and it was "up to" the N. O. T. S. to get them to Europe. And that is what it did.

Sailing from New York, Boston, Philadelphia, Baltimore, Norfolk, Newport News, Charleston and other ports, they took their cargoes to Bordeaux, to Pauillac and Bassens, to St. Nazaire and Nantes, to Havre, Cherbourg, Brest, La Pallice, La Rochelle and Marseilles. Docking and unloading facilities in French ports were very inadequate. Americans had to build vast piers and wharves and warehouses. Channels were tortuous, and nearly every harbor overcrowded. In spite of these drawbacks, notable records were made in quick turn-arounds.

Incomparably greater were the difficulties and dangers faced at sea. Suppose some vessel owner had stepped into a group of his ship captains and told them that they were expected to navigate their vessels 3,000 to 4,000 miles, not singly, where they could give other craft a wide berth, but in formation with a score of other vessels, hugging them as closely as possible. Furthermore, that at night they would have no lights to guide them or indicate the position of other ships in the convoy, but must sail at full speed, changing course every fifteen minutes. And finally, warned the ships' masters that at any moment they might be attacked by submarines, torpedoed and sent to the bottom. Wouldn't that have been enough to make the most hardened seadog throw up his hands and resign his job?

Yet that was what every captain and crew of the N. O. T. S. had to face. They did not fear the submarine half as much as they did the perils of war navigation, the possibilities of collision. One was problematical; they were willing to take chances and eager to get a shot at a "sub." The other danger was constant and might mean the loss of other vessels as well as their own. Under the circumstances, it is remarkable that collisions were so infrequent, and so few vessels were lost or damaged.

Consider the record of the steamship *George G. Henry.* That will give some idea of the work these ships did, and the perils they faced. Having made seven round trips to Europe, averaging 76 days—a splendid record for a cargo steamer—the *Henry* sailed from France for New York. When she was far out at sea, alone, footing her way under full speed, a submarine was sighted 5,000 yards away. This was at 6:50 a. m., September 29, 1918. "Full left wheel" was ordered, general quarters rung in, and the guns went into action.

The "sub" opened fire, some of his shells falling a little short, others going over the vessel. Twenty-one shots from the after-gun made the U-boat keep his distance and get out of range, but he still kept up the chase. After two hours the "sub," which had guns of considerable power, was still pursuing and now and then firing. At last, at nine o'clock, the Germans scored a hit. A six-inch shell struck the *Henry,* piercing the after-deck, plunging diagonally downward, breaking the exhaust pipe of the steering gear and exploding against a magazine filled with powder and shells.

The ammunition exploded, spreading destruction, and starting such a blaze that the whole after-part of the ship was soon in flames. Its powder destroyed, fire raging around it, the after-gun, the one bearing on the enemy, was useless. The crew turned to fighting the fire. Smoke bombs were exploded, and a dense smoke-screen overhung the stern. Thinking he had crippled the ship, the U-boat sailed past the weather end of the smoke-screen, redoubling his fire, using shrapnel and solid shot. Though the vessel was not hit again, the shrapnel exploding over it descended in a rain on the decks and fourteen men of the crew were struck by flying fragments.

By steering obliquely, the *Henry* brought its forward gun to bear, but the "sub" ran out of range. At 10:15 the fire having been got under control, two shells were fired from the after-gun, both striking extremely close to, if not hitting the U-boat. Clouds of yellowish smoke rose from the submarine, which ten minutes later ceased firing and submerged. It had given up the fight.

The enemy disposed of, the N. O. T. S. ship proceeded on its way. Plunging along, with all lights out, five days after its

encounter with the submarine, the *Henry* was nearing the American coast. An outbound convoy, shrouded in darkness, was proceeding from New York. It was midnight, pitch dark, and before either the group going east or the single ship sailing west, knew of each other's presence, the *Henry* ran into the convoy. In a moment, before there was time even to switch on running lights to keep clear of the convoy vessels, the *Henry* crashed into the *Herman Frasch,* cutting into her well below the water line. The *Frasch* had received a mortal wound, and sank in a few minutes right under the bow of the *Henry.*

Three days afterwards, on the other side of the ocean, the steamship *American* collided with the *Westgate,* sending the *Westgate* to the bottom.

Sailors have a superstition that "luck runs in streaks," and it does seem so, for, with the hundreds of N. O. T. S. vessels running back and forth, only four were sunk by collision, and two of these accidents occurred within three days. Of the 450 vessels actually sailing for the N. O. T. S., only 18 were lost—eight were victims of torpedoes or German mines, four were sunk as the result of collisions, and six were lost from other accidents, such as fire or stranding.

One of these cases was the most mysterious thing that happened during the war—the disappearance of the *Cyclops.*

Sailing from Bahia, Brazil, the *Cyclops,* carrying a cargo of manganese, was bound for Baltimore. She was proceeding steadily, with no indication of any doubt as to her seaworthiness. Though she reported having some trouble with one of her engines, her captain felt confident that he could easily reach port, even if using only one engine might somewhat reduce his speed. On March 4th the collier put into Barbados, British West Indies, to take aboard coal for the rest of the voyage. While in that port, there was no indication of anything unusual. Among officers, crew and passengers there seemed to be no apprehension or foreboding of trouble or disaster. After coaling, she sailed away. Many persons saw her sail, other vessels hailed her as she passed out to sea.

After that no one ever saw the *Cyclops* again, or heard one word, or ever found any trace of her. Almost invariably, when a vessel is sunk, bodies of the drowned are found, and a mass

of floating wreckage. But never a soul of all those on the big 19,000-ton collier, never a stick of wreckage or one thing from the lost ship was ever discovered.

The whole area was searched for weeks, scores of vessels joined in the hunt, rewards were offered for the discovery of anything concerning the missing collier. Nothing was ever found. She had disappeared completely, leaving not a trace.

In this connection this last message, the last word received from the *Cyclops* is of melancholy interest:

From: U. S. S. *Cyclops,* Barbados.
To: Opnav.

Arrived Barbados, West Indies, 17303 for bunker coal. Arrive Baltimore, Md., 12013. Notify Office Director Naval Auxiliaries, Comdr. Train (Atl), 07004.

Class 3 U. S. S. CYCLOPS.
DNAS 1145AM 3-4-18.

Three hundred and nine men perished when the *Cyclops* went down. In addition to her officers and crew, she was bringing north some 72 naval personnel who had been serving on United States vessels in South American waters, as well as a few civilians returning from Brazil, among them Mr. Maurice Gottschalk, United States consul at Rio de Janeiro.

What happened to her? There were many theories, most of them wild and untenable; none that seemed to fit the case thoroughly. Many people jumped to the conclusion that she was sunk by a submarine, but, so far as known, there was no submarine anywhere near that region. Others, seizing upon the fact that her captain, Lieutenant Commander G. W. Worley, was a native of Germany, and that a number of the crew had German names, thought captain and crew had turned traitors and taken the ship to Germany. Her captain had come to America as a boy. He had been employed in the Naval Auxiliary Service for nearly twenty years with no evidence of disloyalty. But this belief among some outside the Navy, that the ship had been taken to Germany, persisted until the armistice, when there was undeniable proof that no such vessel had been captured, turned over or sighted, and the Germans knew no more about her fate than we did.

The only theory that seems tenable is that the *Cyclops* was caught in a sudden West Indian hurricane; that her cargo shifted, listing the vessel, which turned turtle and went down. This is the only way in which seamen account for the absence of wreckage. Our colliers of that type have high steel beams like cranes, with chains of buckets to load and unload coal. If she went down bottom-side up, these huge steel fingers may have pinned down everything on deck, allowing nothing to float to the surface. But, like everything else connected with the case, that is all conjecture.

"Fate unknown," is the inscription beside the name of the *Cyclops* on the Navy list. The waves that sweep over the spot where she lies conceal the secret. Her fate will probably remain a mystery until that Last Day when the waters are rolled back and the sea gives up its dead.

The most serious loss of life, next to the *Cyclops,* sustained by the N. O. T. S., was in the sinking of the *Ticonderoga.* This animal transport, manned by Navy personnel but with soldiers aboard to care for the cargo, was almost in mid-Atlantic, though nearer Europe than America, the night of September 29, when her engines broke down and she fell behind her convoy. At 5:30 the next morning she was attacked by the U-152. Though the steamer was riddled by shells, and most of her men were killed or wounded, she fought on for two hours until both her guns were disabled. Lifeboats had been smashed by shell-fire, and there were not even enough rafts left to accommodate all the men. They were hundreds of miles from the nearest land, the Azores, with little hope of getting to shore.

The wounded were given the preference in getting into the boats. Of the 237 men aboard only 24 were saved, the majority of them wounded. Two of the officers, both junior-grade lieutenants, F. L. Muller and J. H. Fulcher, were taken prisoners and carried to Germany by the submarine.

One of the few survivors, Ensign Gustav Ringelman, officer of the deck, said the submarine was sighted only 200 yards off the port bow; the captain put his helm hard to starboard and came within 25 feet of ramming the U-boat. The submarine fired an incendiary shell which struck the ships' bridge, killing the helmsman, crippling the steering gear and setting the amid-

ships section ablaze. Lieutenant Commander J. J. Madison, captain of the *Ticonderoga,* was severely wounded by a piece of this shell. But, wounded as he was, he had himself placed in a chair on the bridge, and continued to direct the fire and maneuver the ship until the vessel had to be abandoned.

Six shots were fired at the *Ticonderoga's* 3-inch forward gun, killing the gun crew and putting the gun out of commission. Then the U-boat drew away some distance, both ship and submarine keeping up the firing. "During this time most everybody on board our ship was either killed or wounded to such an extent that they were practically helpless from shrapnel," said Ringelman. "The lifeboats hanging on the davits were shelled and full of holes, others carried away. However, we kept the submarine off until our fire was put out and our boats swung on the davits, ready to abandon the ship with the few men left on board. Possibly fifty were left by that time—the rest were dead."

The submarine still continued to shell the ship and then came alongside and fired a torpedo, which struck amidships in the engine room. The ship slowly settled.

There was one life-raft left on top of the deck house. The wounded men were gathered together and lashed to the raft, which was then shoved off from the ship. Three or four minutes after that the *Ticonderoga* took the final plunge. The submarine picked up the executive officer out of the water and took the first assistant engineer, Fulcher, off the life raft. As Muller, whom Captain Franz, of the submarine, supposed to be the captain of the *Ticonderoga,* was picked up, Franz's first questions were:

"Where's the chief gunner? Where's the chief gunner's mate?"

"Dead," replied Muller.

Alicke, a machinist's mate of German descent, already hauled aboard the submarine, interpreted for Fulcher. Franz was ordering him to the raft alongside. He pleaded to be kept on board. "Speak for me," he begged his officer, but the German captain replied: "Get back on the raft. What do you mean by fighting against us, against your country? Only God can save such as you now!"

Wounded men on the raft pleaded: "Won't you please take us? We have no food or water; no chance." But Franz answered, "We have room for no more," and cast them adrift.

All on board that raft were lost. The lifeboat, containing mainly wounded soldiers, was threatened by the Germans, who went aboard it in their search for the ship's commander. They failed to discover Captain Madison, who lay, badly wounded, almost under their feet. The Captain and 21 men were in that boat for four days before they were rescued by the British steamer *Moorish Prince.*

The two officers made prisoners found that the submarine was the U-152, which had left Kiel September 5, ordered to operate in American waters. The submarine, Muller and Fulcher said, received on October 11 the order from Berlin, "Engage men of war only; merchant war has ended," and on October 20 the radio, "All submarines return to Kiel."

The U-152 arrived at Kiel November 15, four days after the armistice. The two *Ticonderoga* officers stated that the executive officer of the *Kronprinz Heinrich,* the mother ship of the submarines, formally released them as prisoners, saying, "Naval officers have no more power over you." He blamed the collapse of Germany upon the entry of the United States into the war. "You have ruined our country," he added. "See what you have done!"

He told them that they were free to go ashore and the next day the lieutenants left for Copenhagen, from which they made their way to America.

Only eight N. O. T. S. vessels were lost by enemy action, and six from other causes during the war period. Though the Naval Overseas Transportation Service was not formally organized under that name until January 9, 1918, naval vessels had been performing such service from the beginning of the war. Commander Charles Belknap was the director of this service from its inception until January 17, 1919, when he was succeeded by Rear Admiral Hilary P. Jones. Six million tons of cargo were carried by Navy vessels from May, 1917, to December, 1918, following being the principal items:

For the Army in France	3,102,462 tons
For the Navy (exclusive of coal)	1,090,724 tons

Coal shipped from Norfolk	1,348,177 tons
Coal from Cardiff to France for Army	96,000 tons
Food for the Allies	359,627 tons
	5,996,990 tons

Five hundred million pounds of meats, butter, etc., were carried to our forces overseas, only 4,000 pounds being lost on voyage.

In addition to 1,500,000 tons of coal carried overseas or from England to France, 700,000 tons of fuel oil and gasoline were taken to Brest, Queenstown, the Mediterranean, and the Adriatic. The N. O. T. S. also operated the mine-transports, which carried across the Atlantic 82,000 complete mine-units for the North Sea Barrage.

When rail transportation broke down in the cruel winter of 1917-18, threatening to close down New England's industries and cause widespread suffering, the Navy released large quantities of coal stored at supply bases, and naval vessels hauled to Boston and other ports the fuel which brought relief to that section.

During the war, when there was not enough merchant shipping for commerce in the western hemisphere, N. O. T. S. ships carried American goods, manufactures and other cargoes to and from the West Indies, Mexico, and the ports of Central and South America.

The activities of the N. O. T. S. did not end with the armistice. For many months the Navy continued to haul supplies and fuel to our forces abroad, took commercial cargoes wherever needed, and carried food to the distressed regions of Europe. Its vessels plied to nearly every quarter of the globe—to Russia, Germany, Holland, England, France, Portugal, Spain, Italy, Austria, Greece, Turkey and Arabia; to South America; to Hawaii, the Philippines and China, going as far as Burma, Ceylon, and the Dutch East Indies.

CHAPTER XXII

RADIO GIRDLED THE GLOBE

IF GERMANS HAD CUT EVERY CABLE, WE COULD STILL HAVE TALKED TO EUROPE—FROM ONE ROOM IN NAVY DEPARTMENT FLASHED DESPATCHES TO ENGLAND, FRANCE AND ITALY—CAUGHT GERMAN AS WELL AS ALLIED WIRELESS—QUEER "NEWS" FROM BERLIN—U. S. NAVY BUILT IN FRANCE RADIO STATION WHOSE MESSAGES ARE HEARD AROUND THE WORLD.

IF the Germans had cut every cable—and their U-boats did cut some of them—we would still have been able to keep in touch with Pershing and the Army in France, with Sims in London, Rodman and Strauss in the North Sea, Wilson at Brest, Niblack at Gibraltar, Dunn in the Azores, with all our forces and Allies.

A spark, flashing its wave through the air, would in an instant cross the Atlantic. Caught by the Eiffel tower in Paris or the Lyons station, by the British at Carnarvon, by the tall Italian towers in Rome, it could be quickly transmitted to any commander or chancellory in Europe. That was the marvel wrought by radio.

President Wilson and Secretary Baker in Washington were, so far as time was concerned, in closer touch with Pershing and his forces than President Lincoln and Secretary of War Stanton were with the battle-fields a few miles away in Virginia, during the Civil War. It was infinitely easier for me to send a message or hear from our vessels 3,000 or 4,000 miles distant than it was for Gideon Welles, when he was Secretary of the Navy, to communicate with the Federal ships at Charleston or with Farragut at Mobile.

Vessels at sea could be reached almost as easily as if they had been at their docks. Submarine warnings, routings, all kinds of information and orders were sent to them, fifty or sixty

messages being transmitted simultaneously. At the same time radio operators were intercepting every word or signal sent out by ships. Sometimes, as the operators remarked, "the air was full of them."

"ALLO! ALLO! SOS!" When that call came naval vessels went hurrying to the scene, for it meant that a ship was attacked by submarines. Sometimes in the war zone the air seemed full of "Allos," for ships approaching the European coast could catch the wireless for hundreds of miles, hearing signals one moment from a vessel off Ireland and the next from some craft being attacked in the Bay of Biscay.

From one room of the Navy Department—the "Trans-Ocean Room," we called it—we communicated with all western Europe. Messages went direct to the high-power sending stations at Annapolis, Sayville, Long Island; New Brunswick and Tuckerton, N. J., which flashed them overseas. At the same time dispatches were pouring in at receiving stations, coming into Washington from abroad without interfering with the volume going out.

Stations at San Francisco, San Diego, Pearl Harbor, and Cavite spanned the Pacific, keeping us in touch with the Far East, with China, Japan, the Philippines, and Eastern Russia. North and south from Panama to Alaska were wireless stations, from Darien, on the Isthmus, to far up into the Arctic. These were the "high-powers." At various points along the coast were shore-to-ship stations that communicated with shipping several hundred miles from shore. And there were radio compass stations, which could determine a ship's position at sea.

The United States Navy not only built up this vast system in our own territory, but it erected in France the most powerful radio station in existence. Located near Bordeaux, at Croix d' Hins, it is named the Lafayette, and a tablet on the main building bears the inscription:

> Conceived for the purpose of insuring adequate and uninterrupted trans-Atlantic communication facilities between the American Expeditionary Forces engaged in the World War and the Government of the United States of America.
>
> Erected by the United States Navy in conjunction with and for the Government of France.

Planned in 1917, in response to the earnest desire of our military authorities that steps be taken to insure ample wireless communication, in case cables should be cut or otherwise interrupted, and to supplement the inadequate cable service, this immense plant was fast approaching completion when the armistice was signed. Then work was suspended for a time, but on agreement with the French government was resumed, and pushed to completion.

When, after elaborate tests, the plant was put into operation, on August 21, 1920, I received this radiogram:

> This is the first wireless message to be heard around the world, and marks a milestone on the road of scientific achievement.
>
> LAFAYETTE RADIO STATION.

The Navy takes a just pride in having brought into being that great plant with its eight towers, each 832 feet high, nearly 300 feet higher than the Washington Monument—the first station to girdle the globe by wireless.

During the war the Navy controlled all radio in the United States and its possessions, taking over and operating 59 commercial stations. These fitted easily into the extensive system which the Navy itself had developed, for on January 1, 1917, it owned and operated 55 stations at various points from Panama to Alaska, and from our Atlantic coast across the continent and the Pacific to the Philippines. This had been the work of years.

In August, 1914, immediately after the outbreak of war, Commander S. C. Hooper was sent to Europe to study the latest developments in radio and war communications, and spent six months in England, France, Ireland, Holland and Belgium. His report proved of decided value. A special board, headed by Captain Bullard, was appointed, and this led to the expansion of Navy Radio and the creation, in 1916, of the Naval Communication Service.

Nearly a year before we entered the war, May 6th to 8th, 1916, naval communications, wire and wireless, of the entire country were mobilized, under the supervision of Captain (later Rear Admiral) W. H. G. Bullard, Superintendent of Radio Service. All the apparatus necessary for country-wide communica-

tion by radio or telephone was provided, by the Bureau of Engineering, specially marked, and placed in readiness for operation on twenty-four hours' notice.

Inaugurating war service was, therefore, comparatively simple, and, under the supervision of Captain D. W. Todd, Director of Naval Communications, was easily accomplished. Trans-ocean service with Europe was improved by increasing the power of Tuckerton, N. J., and Sayville, L. I., the German-built stations we had taken over, and placing improved apparatus at New Brunswick, N. J. Work was pushed on the big new station at Annapolis, Md.

At Otter Cliffs, near Bar Harbor, Maine, a receiving station was built that more than doubled the capacity of the existing ones at Chatham, Mass., and Belmar, N. J. Sending and receiving stations were connected by wire with the Navy Department, and use of high speed apparatus, automatic senders and receivers enabled us to handle an immense amount of traffic. Speed in transmission increased from 30 to 100 words a minute in actual practice, and 300 words in pre-arranged tests, and there was almost as marked progress in receiving.

In 1916, experts considered it a very creditable record when 125,000 dispatches were transmitted or received. In the twelve months following April 6, 1918, when traffic was at its height, a million dispatches, averaging 30 words each, were handled from the Navy Department alone. The Naval Communication Service in a single year handled, by wire and wireless, 71,347,860 words.

American merchant ships, as well as naval vessels, were equipped with modern apparatus and furnished competent operators. Thousands of radio operators were required, and 7,000 were enlisted and trained. At Harvard University we established the largest radio school that ever existed. Beginning with 350 students in 1917, the number grew to 3,400 and operators were graduated at the rate of 200 a week.

Air, surface and undersea craft were linked by radio, easily communicating with each other at long distances. Battleships received four messages and transmitted three simultaneously.

During the flight of the Navy planes across the Atlantic, in May, 1919, a message was sent from the Navy Department to

the NC-4 far out at sea. An immediate reply was received from the plane, and this was transmitted to London, Paris, San Francisco and the Panama Canal Zone, and its receipt acknowledged by these stations, thousands of miles apart, all in three minutes after the original message left Washington.

When President Wilson went to France on the *George Washington* to attend the Peace Conference in Paris, we kept in touch with the ship by wireless all the way across the Atlantic. On the return voyage we made a test with the wireless telephone and from an instrument much like the 'phone in your home or office, I talked with the President when he was 1,700 miles at sea.

The radio compass, used first for locating enemy submarines, became a most important aid to navigation. Any ship out of its course or uncertain of its reckoning has only to transmit the signal, "Give me my position." The operator at the radio compass station turns the wheel now this way, then that, until he finds from what point the wireless comes strongest. At the same time other stations along the coast are doing the same thing. Triangulating the directions reported, the master out at sea is told the position of his vessel, the latitude and longitude and, if in danger, is told what course to steer to get out of his predicament.

The saving in life and property has more than compensated for the cost of this system. Beginning with a few on the Atlantic, there are now some 75 of these compass stations all along our coasts.

The necessity of a single control of wireless was shown by an instance that occurred one night in the Navy Department. A message was being received from Darien, in the Panama Canal Zone, when some one broke in on its wave-length and mixed up words and letters in a hopeless jumble. The operator had to stop Darien until he could find out where the trouble was. At last they found it was a station in Nova Scotia, that was testing its apparatus. It had unintentionally "broken" into the wave-length our operators were using, and caused interference clear to Panama.

American news was spread throughout the world by Navy radio. Every night the "Navy Press" was broadcasted, and received by ships far out at sea. Our boys in the army were

quite as eager to hear the news from home, and a complete service, compiled by the Committee on Public Information, was sent to Europe each night, and distributed through the Allied countries, including Russia. Regular reports were sent to South America and the Orient, the latter being distributed throughout China, Japan and Siberia.

Germany had a big Cryptographic Bureau in Berlin, with experts in deciphering languages and codes, which often secured valuable information from intercepted radio messages. With the assistance of able civilians, we built up a corps of code and cipher experts who compared well with those of any country. Frequent changes in codes kept Germany guessing, and afforded a high degree of secrecy to our official communications.

"Listening in" on Nauen, the largest of German stations, Navy operators in America took down nightly the latest news from Berlin. And the "news" the Germans sent out for home consumption and foreign effect was weird and startling. One night in July, 1918, the Germans announced:

> Vaterland sunk! Largest German vessel used by Americans as troop transport, named by them "Leviathan," was torpedoed and sent down today by German submarines!

By wireless, telegraph, bulletins and newspapers, the report was spread all over Germany, and there was general rejoicing throughout the empire.

I did not believe the report and felt it could hardly be true, but I must confess that the dispatch gave me a start. Our latest reports showed that the big transport had sailed from Brest three days previous and was nearly half way home. My anxiety was not relieved until we got positive assurance of her safety. The British radio next day broadcasted the following statement:

> The German wireless and German newspapers have asserted that the former German liner the *Vaterland,* now in use as an American transport, had been torpedoed and sunk. The statement is false. The *Vaterland* has not been sunk. The Vossische-Zeitung says that the Americans had intended to bring over a dozen divisions in the course of a year in this ship. If so the intention may be carried out, for the *Vaterland* is afloat and is in the finest possible condition.

There was bitter disappointment in the "Fatherland" when the German Government gradually broke the news that it was not the *Vaterland,* but another steamer, "almost as big," which had been sunk. It was, in fact, the *Justicia,* a British vessel which had been carrying troops, but was returning empty—and she was nothing like so large as the *Leviathan,* not by 20,000 tons.

That report was only one of the thousand queer things we heard from Germany.

There was laid on my desk every morning a daily newspaper —I suppose it was the only "secret" daily ever gotten out in America—which, compiled and mimeographed by the Naval Communication Service and marked "confidential," was sent in sealed envelopes to officers and officials whose duties compelled them to keep in touch with all that was going on abroad. This contained not only all that Germany was sending out, but a digest of all that was sent out by the British, French and Italians.

We certainly heard some strange "news" from Berlin—things that were news to us. One report, received July 25, 1918, when our troops were proving their valor in Foch's great drive, informed us:

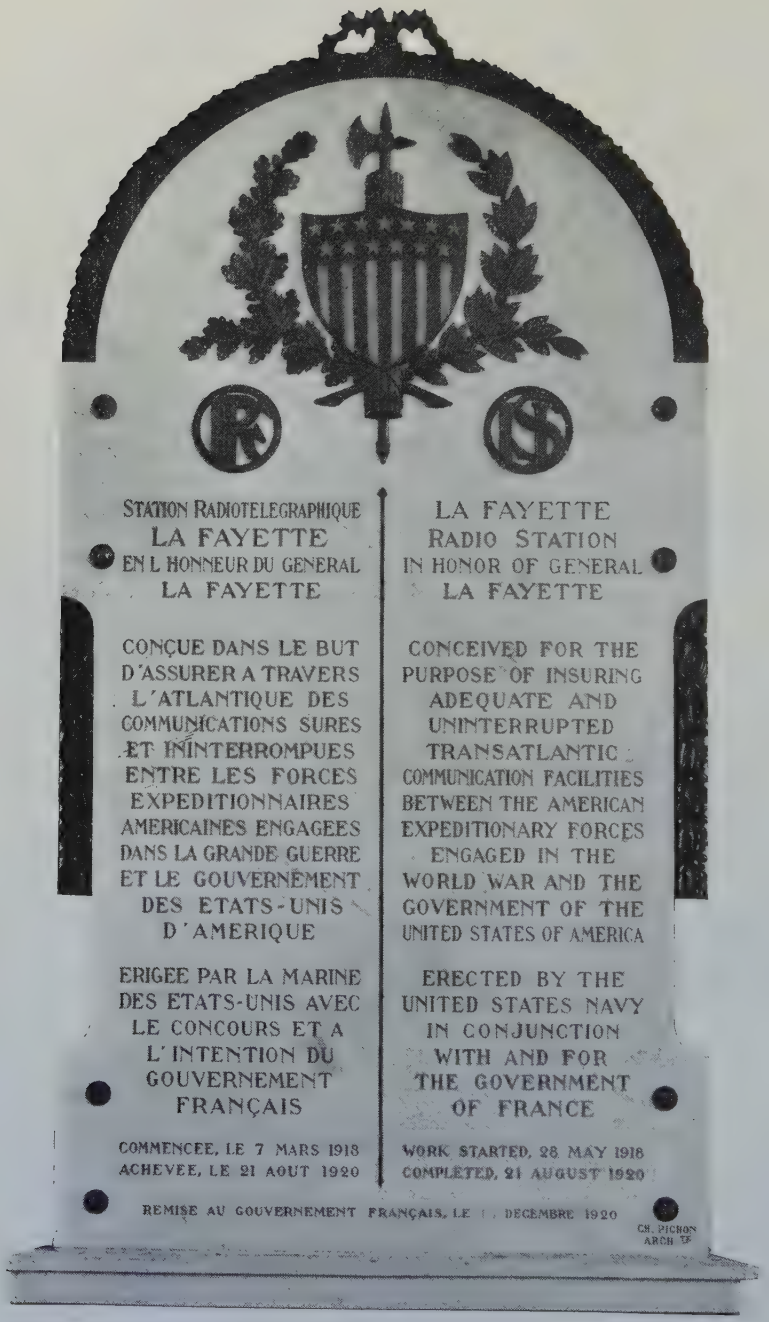
> The American army is lacking in the one essential, the will to fight. In any case, it will not be numerous enough to play any important part until 1920, and then only provided the transport difficulty is got over and the munition industry developed from its present nursery stage. Our submarines will see to the transports, and America will find it impossible to create a gigantic industry and a gigantic army at the same time. Ammunition perhaps, but guns cannot be cast in sewing-machine factories. At present the American soldiers are without either rifles or artillery.

At that moment there were a million American soldiers in France and we were turning out munitions at a rate the Germans could not believe was possible.

The more evident it was that U-boat warfare had failed, the more vehement were the German naval authorities in asserting its success. Admiral Holtzendorff, head of the Admiralty, announced on July 29, that they were taking into consideration the counter measures—(that meant the mine barrage, the

THE STATION WHOSE MESSAGES ARE HEARD AROUND THE WORLD

The Lafayette radio station, the most powerful in the world. Inset: a radio operator at work.


STATION RADIOTELEGRAPHIQUE
LA FAYETTE
EN L HONNEUR DU GENERAL
LA FAYETTE
CONÇUE DANS LE BUT D'ASSURER A TRAVERS L'ATLANTIQUE DES COMMUNICATIONS SURES ET ININTERROMPUES ENTRE LES FORCES EXPEDITIONNAIRES AMERICAINES ENGAGEES DANS LA GRANDE GUERRE ET LE GOUVERNEMENT DES ETATS-UNIS D'AMERIQUE
ERIGEE PAR LA MARINE DES ETATS-UNIS AVEC LE CONCOURS ET A L'INTENTION DU GOUVERNEMENT FRANÇAIS
COMMENCEE, LE 7 MARS 1918
ACHEVEE, LE 21 AOUT 1920
LA FAYETTE
RADIO STATION
IN HONOR OF GENERAL
LA FAYETTE
CONCEIVED FOR THE PURPOSE OF INSURING ADEQUATE AND UNINTERRUPTED TRANSATLANTIC COMMUNICATION FACILITIES BETWEEN THE AMERICAN EXPEDITIONARY FORCES ENGAGED IN THE WORLD WAR AND THE GOVERNMENT OF THE UNITED STATES OF AMERICA
ERECTED BY THE UNITED STATES NAVY IN CONJUNCTION WITH AND FOR THE GOVERNMENT OF FRANCE
WORK STARTED, 28 MAY 1918
COMPLETED, 21 AUGUST 1920
REMISE AU GOUVERNEMENT FRANÇAIS, LE 1 DECEMBRE 1920
CH. PICHON
ARCH DE

THE TABLET ON THE MAIN BUILDING OF THE LAFAYETTE RADIO STATION

destroyers, patrol boats and all the things we were using to defeat them); that the Germans were building many more submarines, and that "final success is guaranteed."

After submarine crews had mutinied and U-boat warfare had ended with the recall of their submarines in October, the German chiefs were still bluffing their own people. As late as November 5, less than a week before the armistice, we caught this bulletin from Berlin:

English wireless service reported, and this report was circulated also in neutral newspapers, that German submarines had passed Norwegian coast on their way home with a white flag at the masthead. This is a pure invention. English wireless has thus again circulated a lie.

At that very time the U-boats were all hurrying home, some of them passing so close to the Norwegian coast, to avoid mines and destroyers, that they could be plainly seen from shore.

When the French and Americans by terrific attacks drove the Germans across the Marne, Berlin announced:

The excellent execution of the movement for changing to the opposite bank of the wide River Marne, which took place unnoticed by the enemy, demonstrates today the splendid ability of the German command and troops.

When the Americans won their notable victory at St. Mihiel we heard from Berlin that the Germans had only "evacuated" the "bend" there to improve lines, and that on the whole, the French and American attacks had failed. And General Wrisberg assured the trusting Teutons back in the fatherland:

The American army also can not terrify us, as we shall settle accounts with them.

Even in November, with total collapse only a few days away, they were still talking of the failure of the Americans and the "victorious repulse" of the French.

After the mutiny at Kiel and other ports, where sailors took possession of the ships and started the revolution, they sent out this bulletin, on November 7:

Concerning situation in Kiel and uprisings in other harbor towns; military protection of Baltic has been carried out without a break by

navy. All warships leaving harbor fly war flags. Movements among sailors and workmen have been brought back to peaceful ways.

The surrender of the German High Seas Fleet was gently termed, the "carrying out of armistice conditions at sea!"

But through the secret service of the Allies, we were kept well informed of all that was going on in the German navy.

The denials of mutinies and revolts were merely amusing to us. We knew the facts. We knew their morale was shattered, that the Allies had "got their nerve."

I do not know any dispatch that amused me more than the one we picked up from Berlin November 16. This showed that the U-boat crews had to be reassured that their lives were safe, even after the armistice; that they had to be coaxed and bribed before they would venture out to take the submarines to England for surrender. Here it is:

Pr. 143. W522—Transocean Press. Berlin, November 16.

German armistice commission has directed to Chancellor Ebert for immediate communication to all submarine crews letter in which it states that English Admiral Sir Roslyn Wemyss has given unreserved and absolute assurance that all crews of submarines to be handed over will be sent back to Germany as soon as possible after their arrival in the harbor appointed by England. Commission therefore requests crews to hand over in good time the submarines.

In connection with this, workmen and soldiers' council of Wilhelmshaven states that all men of ships which are brought into an enemy port are insured for 10,000 marks in case of death. A corresponding special pension has been provided for accidents. Besides, the married men who are concerned in bringing the submarines receive a premium of 500 marks, and finally are to be immediately discharged after their return home.

CHAPTER XXIII

A SURPRISE FOR COUNT VON LUXBURG

"HERR DOCTOR BRECHT," SPEAKER AT HIS BANQUET IN BUENOS AIRES, WAS U. S. NAVAL AGENT—NAVAL INTELLIGENCE FRUSTRATED PLOTS OF GERMANS—FRENCH EXECUTED TWO WOMEN SPIES CAUGHT NEAR ST. NAZAIRE, GIVING GERMANS INFORMATION REGARDING AMERICAN TROOPS.

EVERYONE recalls the Count von Luxburg, German Minister to Argentina, and his famous "spurlos versenkt" dispatch advising his Government that Argentine steamers, if not spared by the U-boats, be sunk without leaving a trace. But there is one incident in connection with that worthy which may, even yet, be news to the Teutons.

One of the speakers at the last big banquet by the Germans in Buenos Aires, over which Luxburg presided—one of the orators they applauded vociferously and patted on the back as the cries of "Hoch der Kaiser!" rang round the festive board, was an agent of the United States Government. And thereby hangs a tale.

When this country broke relations with Germany, German activities in South America were redoubled. The large German population in Brazil not only planned to keep that country from joining the Allies, but talked boldly of "uprisings," and joining in action with the Germans in neighbor countries. We needed to find out more about Teuton activities in that region. An American of varied accomplishments, who spoke Portuguese and Spanish, as well as German, offered his services to the Navy. He had spent years in Germany, and though of a Colonial American family, was a doctor of philosophy of Leipzig University, and intimately acquainted with German conditions and German character. He had volunteered to act as a secret agent, in which capacity he had served the Navy in Spain itself during the Spanish War.

In February, 1917, he was accepted by Naval Intelligence, and on March 3, a month before we declared war, sailed for Brazil. He was no amateur in securing information, and he welcomed the chance of going to Brazil and Argentina, the danger to him rather adding zest to the task.

When he reached southern Brazil as a German emissary coming from Switzerland, he was taken into their clubs and councils, and told what they planned and plotted. He was with the optimistic Teuton singers as they roared out "Die Wacht am Rhein" and "Deutschland über Alles," and toasted "Der Tag"—the day when Germany would gather in its spoils in South America. He attended the secret meetings of German intriguers and learned their secrets. But, suspected at last, he was attacked by burly Teutons and emerged with a broken head and a badly hurt arm.

Departing for Argentina, he appeared there as "Dr. Ernst Brecht," bearing tidings from the Germans in Brazil, which had just declared war. He was taken into their inner circles, their plots and purposes were poured into his ears. Not once did they have the faintest suspicion that he was an American, much less a Government agent.

Members of the German legation staff conferred with him. Plotting and intriguing there, as they did in the United States, they were pretending the greatest friendship for Argentina, giving officials and people to understand that, while the U-boats might be sinking vessels of other nations without warning, Argentinian shipping was exempt. If any of its ships were sunk, it was only a regrettable mistake. And at the very time Luxburg was talking this dear friendliness, he was sending "spurlos versenkt" messages to the German Government.

"Doctor Brecht" had many adventures, but the most picturesque was the rôle he played in Buenos Aires. Joining at once the German "Bund," which had branches all over the Argentine, the "Doctor" formed one of the group of well-known Austrians and Germans which gathered at the famous round-table in the Bismarck restaurant.

At the annual banquet of the Deutscher Bund, the German event of the year, Count von Luxburg presided. "Herr Doctor Ernst Brecht" was called upon to speak on behalf of the Ger-

mans of Brazil. Giving a touching account of the situation of the Brazilian Teutons and their determination and devotion to the cause of the "Vaterland," he ended by quoting a bellicose poem written by a well-known German poetess who lived at Blumenau, the hotbed of Teutonism in Brazil.

He was cheered and applauded enthusiastically, and Count von Luxburg himself unbent far enough to thank the speaker for his inspiring words and express the hope that his sojourn in the hospitable Argentine would prove pleasant and profitable. It certainly did—but in a way that the Count never suspected.

There was general regret when "Doctor Brecht" announced that he felt compelled within a few weeks to return to Europe. He had found that the German officials were planning to send important dispatches they would not entrust to the mails, and they planned at first to make him their messenger. But before this was arranged, Luxburg's code messages regarding the U-boat warfare were published by the United States. The Count was amazed.

Sent in a complicated code known only to himself and the Berlin Foreign Office, five thousand miles away; cabled by the minister of another country among his own private dispatches, he could not understand how those messages could be captured and deciphered by the Americans. It was evident that they were not so stupid as he and Captain von Papen thought they were.

Luxburg's dispatches, when made public, led to uprisings against the Germans, making it impossible for him to remain in Argentina. The day the Count got his passports, September 12, 1917, "Doctor Brecht" had left the Bismarck restaurant and was on his way home with a German acquaintance when they saw a fire in the distance, and found the German Club was burning. It had been mobbed and set on fire by pro-Ally students and others. Seeing the club half destroyed, the Doctor and his companion returned to the Bismarck to inform their confreres. But they found that the restaurant had been completely gutted by a mob, the tables and dishes smashed, and every portrait of the Kaiser, Hindenburg, and other "heroes" slashed to pieces.

Germany had been astonished a few months before by the publication of Foreign Minister Zimmerman's note to the Ger-

man Minister in Mexico, proposing an alliance of Germany and Mexico to make war against the United States. There was nothing the Germans guarded more closely than that.

Yet before Bernstorff reached Europe, that secret dispatch was published, and the first thing the German Ambassador to Sweden demanded to know when the Count reached Christiania, was how the Americans ever managed to get hold of it. The Foreign Office was stunned. Not only had its plot been exposed, but the exposure had shown that the Allies could decipher the most secret and puzzling code they could devise.

Captain von Papen, who once called us "those idiotic Yankees," might have told them that we were more alert than he had supposed, for the exposure of his dealings in every detail; of the activities of Wolf von Igel, his aide; of Doctor Albert, of Fritz von Rintelen; of the ship-bomb plots; the plan to blow up the Welland Canal locks, and various other German intrigues, must have by that time convinced him that the Americans had some secret service of their own. When, on December 4, 1915, our Government demanded the recall of Papen, who was military attaché of the German embassy, and Captain Boy-Ed, the naval attaché, it was merely stated that the cause was "improper activity in military matters." Both protested, declaring that they had done nothing illegal. But later we published a full account of Papen's activities, with photographs of his checks, the exact amounts paid to his tools who did the dirty work, to whom they were paid and for what purpose. It was shown that Boy-Ed had transactions amounting to millions with German steamship lines whose officials were, through false manifests, sending out ships laden with coal and other supplies for German raiders.

Boy-Ed, at that, did not seem to be so deeply involved as Papen was. He protested that he had no part in conspiring with Huerta, and had never seen the Mexican "ex-President." But it was known that Rintelen had had dealings with Huerta, and that Rintelen had received from Boy-Ed at least half a million dollars. The dealings of Captain von Papen with Huerta were too thoroughly disclosed to admit of denial.

Germany, beginning years before, had built up in this country an extensive spy system, which kept it informed not only of

military developments, but of what was done in every branch of industry. When the European war began they used every possible means of preventing the manufacture of munitions or supplies for the Allies. Nearly every large factory or plant had in its employ workmen who were paid agents of the German Government. That they could secure information of what was going on was not so menacing as what they might do, for one or two men could damage machinery so as to retard work for months. There were explosions in munition plants, machinery was at times mysteriously wrecked, shells were damaged; and while the cause seldom could be definitely determined, it was the general belief that many of these "accidents" were the work of German agents.

The Office of Naval Intelligence, whose function in peace times is to gather naval information from all parts of the world, had a more difficult task to perform when war came. An Investigation Section was formed to seek out and take into custody persons who were, by sabotage, explosion, fomenting strikes or other means, seeking to prevent or retard the manufacture of munitions; to discover and thwart any attempt to damage vessels, shipyards, bases or factories; to counteract German propaganda and, in general, restrain the activities of Germans and German sympathizers.

In each naval district there was an Aide for Information, reporting to Rear Admiral Roger Welles, Director of Naval Intelligence, at Washington. Each district was further subdivided into sections with representatives working under the district aid. The activity of these aides was tremendous, especially in our large ports of entry, New York, Boston, Philadelphia, Baltimore, and Norfolk. Arrests of suspects sent fear into the hearts of any who might be plotting sabotage. In one day I ordered the arrest of more than a score in one plant.

Ships from countries near Germany were examined from truck to keel for contraband, or papers or literature that might convey secret messages. Passengers and crews were carefully scrutinized. Close inspection and censorship of mails and cables prevented Germany from communicating with its agents in this country, and also prevented them from sending out military information.

Outgoing ships were carefully inspected to prevent them from taking supplies or materials to Germany. Some neutral vessels had been carrying from America quantities of spare machinery and electrical parts, especially those composed of copper, brass and zinc. There was reason to believe much of this was smuggled to Germany and used in the manufacture of parts for U-boats. Radio apparatus was purchased in quantities. Ships leaving for Holland or Sweden sometimes sailed with enough lubricating oil to take them around the world. Much of it must have "leaked" into Germany. This traffic was greatly reduced, and that in contraband practically ended.

Military guards were placed around piers, no enemy or suspected aliens were allowed to work around shipping, and all dock workers were required to carry identification cards. Vessels were under government supervision during their entire stay in port.

Not only navy yards and shipyards were kept under surveillance, but all plants engaged on naval work were constantly inspected. Thus all sources of production were protected from enemy activity. For this purpose a Plant Division was created, which also reported any undesirable working conditions or lack of fire protection. This led later to the creation of the Fire Prevention Section of the War Industries Board.

Admiral Welles kept in close touch with the Director of Military Intelligence, the State and Labor Departments, and the Department of Justice. Naval attachés abroad obtained a large amount of information regarding "trading with the enemy" as well as military activities, and this was transmitted to the War Industries Board, the State and War Departments. The Bureau of War Trade Intelligence coöperated with the Navy in holding up undesirable imports and exports.

Information regarding foreign navies and ships and war developments was compiled and disseminated, in confidential publications, to all our forces afloat. Fleet, Force and Division commanders were kept informed of the activities of all fleets, Allied and enemy, of ships sunk, and tonnage destruction; of the number and tracks of submarines in the Atlantic and Mediterranean; and of all efforts made by the Allied and associated powers.

The British had a remarkably complete system which constantly improved, so that, in the latter part of the war, it was said that they were informed of the sailing of every submarine sent out from Germany, and its probable destination. We had the advantage of this, as well as the information obtained by France and Italy. We had our own agents in most foreign countries, and maintained quite a force in France.

The most important of these activities was along the coast around Brest and St. Nazaire, the centers of troop and supply traffic. German agents, it was reported, were using Belle Ile as a signal station to advise their submarines.

Convoys reported suspicious lights, and it was believed that these were informers on shore signalling to U-boats. The submarines used various disguises. One, submerged with its periscope showing, lay hidden for hours in the midst of a fishing fleet. Yet the fishermen paid so little attention to it that the French semaphore station, only a few kilometers away, was not notified. A Greek merchantman hove in sight, the U-boat fired a torpedo and the steamship was sunk.

The French authorities welcomed our intelligence officers, and together they set about developing an efficient service all along the coast. A U. S. Naval Reserve officer who spoke French fluently was attached to the staff of the French commander-in-chief in Brittany. That coast is rugged and bold, with groups of small islands. The most important is Belle-Ile-en-Mer, twelve kilometers from shore, the first land sighted by convoys going to St. Nazaire, and the last seen on their way home. At the northern end is the famous "Passage de la Tenouse," leading to the bay of Quiberon. Once through this passage and in the bay, ships were considered safe from submarines. One group of our first troop convoys was attacked three miles west of the Point des Poulin, the entrance to this passage, and several shells fired by the transports ricocheted and exploded on the rocky bluffs of the island. West-bound convoys were assembled in Quiberon Bay. Every effort was made to conceal their departure, but the information that enemy submarines seemed to obtain at times was startling. When the merchant convoy system was inaugurated, ships were instructed to anchor off Le Palais, in the lee of Belle Ile. Two days later

a submarine laid mines in the roadstead. The next night ships were anchored two miles to the north, but within twelve hours mines were laid there.

Lights and signals were not the only means of enemy communication. Some fisherman, seeing the transports in the bay, might go out at night and inform a submarine, which could radio the news to all the U-boats in the vicinity.

These were the conditions that had to be met. Every report of suspicious happenings had to be investigated, and the French were quite willing that the American Navy assume this task, as it was responsible for most of the convoy work through these waters.

With the greatest care and secrecy, forty-five of the most intelligent fishermen who had boats of their own were selected, and formed into a patrol service. Proceeding with their fishing, they were instructed to watch for any sign of submarines or mines and report it immediately. Furthermore, they were to report any mysterious behavior of fishermen or strangers in boats, and any lights or suspicious happenings along the coast. Experienced detectives were employed, with headquarters at Nantes, to investigate all reports. A flood of them came in from the population who, like the French officers, seemed anxious to aid the Americans.

Hundreds of investigations were made, fishermen and residents ashore were aroused to the necessity of reporting everything that seemed likely to aid the enemy, and an intelligence system was built up that was no small factor in making safe the coast of France.

Women spies were found, now and then; quite as dangerous as the men in enemy pay. The most remarkable and pathetic instance, perhaps, was the "Alvarez Case," handled by the French from its beginning to its tragic end.

In the spring of 1917, French agents in Barcelona, Spain, reported that two women known as the Alvarez sisters, were associating with a man strongly suspected of being in the German secret service. Soon afterward they disappeared, and for two months their whereabouts was unknown. The Paris authorities directed that all regions in France, particularly the American zone, be searched for them. They were at last discovered

in the seacoast town of Sables d' Olonne, thirty miles south of St. Nazaire, where our troop convoys landed. They were closely watched and when they boarded a train for Bordeaux, evidently attempting to get back to Spain, they were arrested. Upon trial it proved that they had come under the influence of German agents in Spain and had been induced by an offer of 50,000 francs to obtain information, among other things, concerning the American troops disembarking in Brittany.

By this trial the mystery of the blowing up of the French destroyer *Enseigne Roux* was cleared up. It turned out that the condemned sisters had been closely associated with a French sailor named Gaitton, and evidence pointed to him as having mixed dynamite with the bunker coal on the destroyer. This was not conclusively proved, but Gaitton had enough counts against him to be sentenced to twenty years in a naval prison.

The Alvarez sisters were convicted, and were sentenced to be shot. The execution took place at daybreak in the courtyard of the ancient Chateau of Anne de Bretagne, at Nantes. In the courtyard were assembled the officers in charge of the execution, government officials and witnesses.

The women were led to two posts near the wall of the chateau, and the last words were spoken to them by the priest. At their trial they had confessed all, so there was little left to say. One was in a fainting condition, but the elder of the two proved unusually courageous. She refused to be blindfolded, and stood her ground.

An army officer read the sentence. There was a volley of musketry, and the blindfolded woman dropped to the ground. But the sister who had shown such courage, though mortally wounded, remained erect, and had to be despatched by a shot from a revolver.

The Naval Intelligence officer who gave Admiral Welles the account of this pathetic case, from which are taken the particulars recited above, wrote:

"For years to come, when the American tourists visit the now historic ports of the American Expeditionary Forces, they will see, if they look carefully, a few scars on the thick wall of the Chateau courtyard at Nantes. These are the marks of bullets which ended the careers of two poor deluded women who attempted to betray the Allies. * * *"

CHAPTER XXIV

AMERICAN ADMIRAL SAVED KOLCHAK

HEAD OF RUSSIAN FLEET RELEASED FROM PRISON AFTER GLENNON'S ADDRESS TO MUTINOUS SAILORS—AFTER MISSION TO WASHINGTON, BECAME HEAD OF OMSK GOVERNMENT—KILLED BY BOLSHEVIKI—UNITED STATES VESSELS IN NORTHERN AND WESTERN RUSSIA—KNIGHT AT VLADIVOSTOK—MC CULLY AT MURMANSK AND ARCHANGEL.

WHEN revolution swept Russia in 1917, the sailors of the Baltic Fleet mutinied, assassinated their commander-in-chief, and murdered a hundred officers. The Black Sea Fleet for the time remained loyal, but in June revolted and deposed its commander.

The American mission headed by Elihu Root, of which Admiral James H. Glennon was the naval representative, had just arrived in Petrograd. The sailors at Sebastopol on June 20th voted to remove Admiral Kolchak, send him to prison and elect a commander-in-chief from their own ranks. When the Admiral was notified, he appeared on the quarter-deck of his flagship and addressed his men. Appealing in the name of Russia and the cause for which she was fighting with the Allies, he urged them to remain loyal. But the sailors refused. They were bent on taking control. There was nothing for the Admiral to do but to give up his command, and leave the fleet to be managed by a committee.

They demanded his sword, but he would not give it. Drawing it from its scabbard, he saluted the Russian flag, and threw the shimmering blade into the sea. Turning upon his heel sharply, the former commander-in-chief came down from the quarter-deck, climbed over the side of the flagship into a waiting boat, and was taken to Sebastopol, where he was put in prison along with Smirnoff and other officers. Kolchak might have met the same fate as the commander-in-chief of the Baltic Fleet.

"Execution by order of the Sailors' Soviet" is quite as deadly as assassination.

Unaware of the serious situation that had developed, Admiral Glennon set out for Sebastopol to visit Kolchak and the Black Sea Fleet. With him went Admiral Newton A. McCully, naval attaché, a master of the Russian tongue and a great admirer of the Russian people, whose affection and confidence he has held through all events.

The first intimation the American admirals had that they were about to face unusual circumstances was when, on reaching the station in Sebastopol, they found a reception committee awaiting them composed wholly of workmen and sailors. There were no officers. Kolchak was not there, nor had he sent any members of his staff to greet them. Glennon and McCully were quick enough to catch the significance of this unexpected welcome, and to accommodate themselves to its peculiar character.

"They wore no swords," said Admiral Glennon, "so the American officers left their swords in the train."

The American officers were taken to the flagship, from which Kolchak had been deposed the day before. Standing on the quarter-deck, where Kolchak had stood in his final appeal, Admiral Glennon spoke to the sailors on the meaning of democracy. He paid a generous tribute to their ships. He spoke of Russia's bravery, and urged the sailors to stand by the cause for which the Allies were fighting. Referring feelingly to the cordial relations which had always existed between Russia and the United States, he made much of the argument for the continued friendship and coöperation of these nations, now the two biggest republics in the world. But not a word did he say of the deposed officers.

Admiral Glennon is a big man, of commanding appearance, but with a kindly and genial bearing. His speech made a deep impression on the sailors. Evidently they talked over the things he had said and decided to show their appreciation in some way. When the American admirals and other officers were boarding their train to return to Petrograd, representatives of the sailors came on board and told Admiral Glennon that they had voted to restore the arms to all the deposed officers except Kolchak and Smirnoff. These two, they said, they would probably keep

in prison and bring to trial. Admiral Glennon saw his chance. Manifestly these sailors wanted to please the Americans. They were a little afraid of Kolchak and Smirnoff, so they felt obliged to keep them in prison, but probably, if the Russian admirals were to leave Sebastopol and the region of the Black Sea, the sailors would be satisfied. So Admiral Glennon, smiling down from his towering height upon the shorter Russians, made a proposal. In effect he said: "Release Smirnoff and Kolchak, and we will take them to Petrograd with us." Petrograd was far away. Moreover the authority of Petrograd was still recognized, so the sailors agreed. Kolchak and Smirnoff were taken from prison and put on board the train with the Americans. For them it was deliverance from almost certain death. It is little wonder that Kolchak regarded Glennon with the greatest affection and gratitude. A few weeks later he came to the United States at the head of a Russian naval mission, and his renewal of acquaintance with Admiral Glennon was like the meeting of brothers.

I had a chance to see a good deal of Kolchak while the mission was here. He was said to be of Tartar descent. Of medium height and very dark complexion, he had piercing eyes and a determined expression. He admired Farragut greatly, and made a special trip to his tomb to place a wreath upon it. He was also a great admirer of our Arctic explorers, probably because of his own Polar service. I remember the dinner Admiral Kolchak gave at a Washington hotel to the Secretary of the Navy and prominent naval officers just before he took his departure in 1917. It was about the gloomiest, most funereal occasion I experienced in all my eight years in Washington. News had just arrived of a German victory over the Russians in the Baltic. The Kerensky government was in a perilous position. The depressing situation was reflected in the solemn faces of the banqueters. I did my best to cheer Kolchak, predicting a wonderful future for a democratic Russia when the Allies and America had won the war.

"Do you really believe Russia can again have peace?" he asked me, and the tone of his question spoke his own despair. The premonition of tragedy must have been in his soul. At the end of October he sailed from San Francisco, intending to re-

turn to European Russia by Siberia. When he reached Japan he found the Bolsheviki had seized power and Kerensky was a fugitive. The Bolshevik government offered him and his officers safe journey to Petrograd, if they would recognize its authority and swear allegiance. Kolchak refused.

Gathering together the forces opposing Lenine, he became leader of the anti-Bolshevik movement in Siberia. In the spring of 1919, when the Admiral was head of the Omsk government, the world thought he was going to succeed in his great effort to overthrow Lenine and Trotzky. Then the tide turned. He was driven back. His retreat became a rout. When he reached the region of Lake Baikal, his forces disintegrated and fled, leaving him alone. One day in January, 1920, a revolutionary group raided the village of Innokentieskaya, near Irkutsk, and found Kolchak. They took him prisoner, and turned him over to the Bolshevik commissairs. There was a perfunctory court-martial, which passed the predetermined sentence of death.

In the early dawn of February 7, he was led from his cell to the courtyard of a building in Irkutsk, where he was stood with his back to the wall. It was too dark to see his face distinctly, the stories that came to us stated; so a soldier held a lighted lamp near it to guide the firing squad. When the command to fire was given, the squad failed to obey. Angered at their soft-hearted reluctance, the Bolshevik commissair who was supervising the execution pushed the squad aside, strode up to Kolchak, and shot him down.

Thus the famous Russian admiral met his fate.

The debacle in Russia profoundly disturbed America. It was due primarily to the failure of communication and transportation. Russia was shut off at the Dardanelles by the Turks and at the Danish Sound in the Baltic by the Germans. When the Kerensky government was organized there was hope by the oldest republic in the New World for the success of the newest republic in the Old World. The coup d'etat of the Bolshevists, who soon made the treaty of Brest-Litovsk with the Germans, gave pause to the Allied forces, who felt it necessary to take steps on what had been the "Eastern front" to prevent the use of Russian manpower against them. Fifty million dollars of

their supplies were piled up at Archangel, which the Bolshevists were undertaking to confiscate and move into the interior. The Germans were seeking a submarine base on the Murman coast in order to gain access to the sea which they had been so long denied.

These dangers drew Allied forces into Northern Russia. In May, 1918, the *U. S. S. Olympia,* which won fame as Dewey's flagship at Manila Bay, arrived at Murmansk with Lieutenant General Poole, of the British army, and a small detachment of troops. They drove off an attack at Pechenga. A small group of Russian naval officers, who could not reconcile themselves to Bolshevik rule, spent the winter on a sealing trip. They believed themselves safe when in sight of the Murman coast with their cargo of skins worth $35,000. Without warning a German submarine came up alongside and sank their vessel, few of the crew escaping.

The Murmansk Soviet could not retaliate because, by the treaty of Brest-Litovsk, the Russian navy could take no further part in the war. So they turned over their navy, consisting of three destroyers, one to the British, one to the French, and one to the *Olympia* when she arrived. I dare say few people, even in the Navy, knew that we possessed a destroyer named the *Karitan Yurasovsky.* Its crew was half Russian and half American. It was a queer sort of arrangement, but Admiral McCully, in command of Naval Forces in Northern Russian Waters, said "It worked remarkably well, there never being the least sign of friction, and the destroyer always ready for duty."

Not much has been heard of the U. S. flotilla on Lake Onega. When the Allied forces, including a small detachment from the *Yankton,* were on the line of march within 300 miles of Petrograd, there was need of water transportation. Our small naval contingent was equal to the emergency. Two motor boats, each with a short one-pounder in the bow and a machine-gun on the beam, were transported by rail down to near Lake Onega, then hauled miles through the woods, and launched in the lake on May 27, 1919. Three times they were engaged with Bolshevik gun-boats at long ranges.

In June, 1918, the *Olympia* sent a detachment 150 strong to Kandalaska to assist in guarding that point. When the Mur-

mansk government broke with the Bolsheviki, Allied troops landed in Murmansk. In August a detachment from the *Olympia* under Captain Bierer took part in the successful expedition against Archangel. This same detachment under Lieutenant Hicks bore their share in the pursuit of the retreating Bolshevists to the interior, having some hard fighting. Under Colonel G. W. Stewart, the 339th Infantry Regiment and 310th Engineers, about 5,600 men, having just completed their training at Aldershot, reached Northern Russia September 4th, and they remained all winter. They were immediately put in the front line, doing practically all the fighting that was done, and during this time losing more men in action than all the other Allies combined. The small detachment of Navy men privileged to fight with their army brethren in Northern Russia, regard them as among the noblest of all fighting forces.

The Asiatic Fleet, under command of Admiral Austin M. Knight, coöperated with the Japanese and other Allied forces in the Far East, and the flagship *Brooklyn* or some other vessels were almost constantly at Vladivostok, where Admiral Knight took a prominent part in the conferences and operations to check enemy and hostile activities.

In June, 1918, Vladivostok and nearly all of Siberia fell into the hands of the Bolsheviki. Assisted by German and Austrian prisoners of war, they were resisting the advance of the Czecho-Slovaks who, fighting their way for thousands of miles through Russia, were endeavoring to reach the eastern coast, where Allied vessels might take them home. Vladivostok was their destination, but they had hard fighting before they could enter. On June 29 they took the city after a three-hour battle with the Bolsheviki. There were 12,000 of the Czecho-Slovaks, but only 2,500 of them were armed and equipped. The city was still in an uproar, with desultory firing at various points. In the afternoon Admiral Knight ordered ashore Marines and sailors to guard the American consulate, and to act as part of a patrol force composed of British, Japanese, Chinese and Czecho-Slovaks who patrolled the city, preventing destruction and preserving order.

Marines from the *Brooklyn* in July guarded the German and Austrian prisoners of war on Russian Island, five miles from

Vladivostok. Our Navy had a radio station there. Men from our ships formed a part of the force of British marines, Japanese and Chinese bluejackets and Czecho-Slovak soldiers organized to guard the Russian navy yard at Vladivostok, and prevent disorder in the city.

The United States Asiatic Fleet performed a valuable function in the Far East. Guarding American interests and cooperating with the Allied forces, its vessels operated from the Philippines to the Russian coast. They exerted, as always, decided influence in China, supporting the Chinese Government in its stand with the Allies. Though the Japanese had long before taken Kiao-Chau, the German stronghold, and the Teuton strength was broken, constant efforts were required to prevent the German propaganda and agitation from causing trouble. A sharp lookout was maintained for German raiders. One, the famous *Seeadler,* sank two American vessels in the Pacific. But after it was run down and disposed of, no more raiders appeared.

Our vessels in the Pacific were of material assistance to the Army when American troops were sent to Russia to protect the Siberian railway, and again when they were being returned from Russia. Admiral William L. Rodgers succeeded to the command of the Asiatic Fleet in the latter part of 1918 and continued until late in 1919, when he was succeeded by Admiral Gleaves. Some of our vessels were at Vladivostok practically all the time. One of the first suggestions made by the British when we entered the war was that we maintain our force in Asiatic waters, and while the vessels were few in number, they performed excellent and necessary service.

EAGLE BOATS AT ANCHOR IN THE ICE OF THE WHITE SEA

Insets: Rear Admiral James H. Glennon (left); Admiral Kolchak.

THE HALF-WAY HOUSE

The harbor of Ponta Delgada, the naval base in the Azores. Inset: One of the 7″ guns at Ponta Delgada manned by U. S. Marines.

CHAPTER XXV

THE HALF-WAY HOUSE

AZORES VITAL IN NAVAL OPERATIONS—"ORION" CELEBRATED FOURTH OF JULY BY DRIVING OFF U-BOAT THAT WAS SHELLING PONTA DELGADA—HUNDREDS OF AMERICAN SHIPS STOPPED THERE ON THE WAY ACROSS—DUNN IN COMMAND OF BASE—MARINES MANNED GUNS, MAINTAINED AERIAL PATROL—SUBMARINES KEPT OFF SUBMARINES.

THE Fourth of July, 1917, was ushered in by the booming of American guns, not in the United States, but in the far-away Azores.

Bright and early, at 4:45 a. m. (not long after midnight in this country), a German submarine began bombarding Ponta Delgada, the principal city in the islands. The U-boat was one of the largest type, with powerful guns, and she poured a rain of shells that crashed into stores and residences, and exploded in the streets. People were panic stricken. The antiquated forts were no defense. Their guns were not of sufficient caliber to cope with the enemy. Knowing this, the Germans thought they would have a picnic, without any risk or interruption, shelling an undefended city and terrorizing its helpless inhabitants.

But relief came from an unexpected source. The United States naval collier *Orion* was in port, and three minutes after the enemy began operations, her guns were in action. This was a surprise for the submarine. When the shells began to fall around her, the Germans could not imagine where they came from. The *Orion* was at a dock 2,000 yards away on the other side of a point of land that juts out into the harbor. She could not sail out immediately, as her stern had been hoisted to make repairs. But she promptly turned her guns on the intruder, and in a few moments the enemy found he was faced by a formidable foe.

The *Orion's* fire was too hot for the Germans. Its shells were falling uncomfortably close; its gunners rapidly getting the range. Not many minutes later the U-boat, baffled and disappointed, disappeared. The submarine, it was discovered later, was the famous *Deutschland,* the U-155.

Proclaiming that the American collier had saved the city, the whole town joined in a spontaneous celebration. The captain of the *Orion,* Lieutenant Commander J. H. Boesch, was cheered and fêted, as was his whole crew. Officials tendered him their formal thanks, and he became a hero in the Azores. All kinds of honors were paid him, and later he was presented with a handsome gift, expressing the gratitude of the Delgadans. They even named brands of cigars for him, with his picture on the boxes—and I know no more conclusive evidence of popular favor than that.

These islands—the "half-way point between America and Europe"—were vitally important in our naval operations, and soon after war was declared, we began negotiations with Portugal for permission to establish an American naval base at that strategic point. U-boats of large type were already operating in that region. Had the Germans succeeded in establishing a base there or in utilizing the islands for supplying or refueling submarines, they could have seriously menaced our troop and cargo transportation, and trans-Atlantic lines of communication.

The necessity of protecting this locality was emphasized in a dispatch from our London headquarters on July 13, and letters of July 30, 1917, in which we were informed that England had sent a mystery ship and two submarines to the Azores, and the hope was expressed that the United States would do the same. "The advisability," said the report, "of the United States sending one of the older battleships with perhaps two or three auxiliary craft to the Azores to prevent the use of these islands as a base during the coming winter should be considered." The Germans had, about that time, sent out the former *Deutschland* to cruise in the vicinity of the Azores.

Early in August, 1917, the *U. S. S. Panther* and five coal-burning destroyers arrived at Ponta Delgada "to operate against enemy vessels, to assist torpedoed vessels and rescue survivors, and to deny the island to enemy submarines which

might try to use them as a base" In September the *Wheeling,* with two destroyers, arrived, relieving the *Panther* and destroyers, which had been ordered to French waters. The *Wheeling's* captain was acting base commander.

On October 28, a division of U. S. submarines, the K-1, K-2, K-5 and K-6, arrived, and later the E-1. These submarines and our destroyers patrolled the waters around the Azores, and from the time operations began there was practically no enemy submarine activity around the islands, although the German Government had declared this a "barred zone."

As a result of the Allied Naval Conference at London, in September, 1917, it was decided to establish a British naval intelligence center in the Azores and to build a radio station eight miles west of Ponta Delgada. Our Navy mounted a seven-inch gun on a high bluff for its protection. This radio station was of great value, for prior to its construction communication from the Azores was by cable to the United States and thence to Europe. By arrangement, all British naval units served under the general direction of the United States senior naval officer.

As soon as the diplomatic negotiations with Portugal were completed, I directed Admiral H. O. Dunn to proceed to Ponta Delgada and establish a regular naval base. He embarked on the *Hancock,* with a complete advance base outfit, and a detachment of Marine aviators with aircraft. Guns were mounted at Ponta Delgada to defend the harbor, and nets and other torpedo defenses were stretched across the entrance.

The First Marine Aeronautic Company, 12 officers and 133 men, operated an anti-submarine patrol of ten R-6 and two N-9 seaplanes, and six HS-2-L flying boats. Major Francis T. Evans was in command to July 18, 1918, when he was succeeded by Major David L. S. Brewster, who was in command of these Marines until they were ordered home January 20, 1919. Submarines and destroyers as well as aircraft, operated from Ponta Delgada. The establishment of a hospital afforded treatment and comfort not only to the personnel on duty there, but alike to men and officers passing through, and to the people on the islands, who suffered greatly during the influenza epidemic. Large warehouses, filled with stores, furnished supplies to ships stopping at Ponta Delgada.

In addition to the value of this base to our own operations, its potential value is seen from the fact that never after its establishment did German submarines appear off the island. Several operated in that region but were careful not to approach within reach of our guns.

"The occupation of the Azores," said Admiral Dunn, "was of great strategic value from the mere fact that had it been in possession of the enemy, it would have formed an ideal base for submarines, and as our convoy routes passed north and south of the islands an enemy base would have been a very serious obstacle for the successful transport across the ocean of troops and supplies."

All our submarine chasers, tugs and small craft sent to Europe stopped at the Azores for fuel, provisions and repairs. Our repair ship and station were found invaluable, particularly during the stormy winter when many merchant vessels broke down in the vicinity. Tugs were sent out to tow them in, repairs were promptly made, and they were sent on their way. In several instances, merchant vessels were rescued at distances of 400 to 500 miles from the islands. The relations between the American naval officers and Portuguese authorities in the Azores were most cordial, and this coöperation strengthened the ties between the United States and Portugal.

If Portugal had not been in the war as an ally, it would have been a tremendously difficult problem to have gotten across any of the yachts and sub-chasers, and a large portion of our destroyers, because they did not have the steaming radius to cover the more than 3,000 miles of ocean between us and the coast of Europe. But for the base in the Azores and Portugal's cooperation, we would have lacked a place to re-fuel in mid-ocean. Before the Azores was open to us we were forced to establish a mobile oil base at sea, moving the oilers secretly to fuel our destroyers as they went across. Discovery of such an oil base by the Germans would have been fatal to us, as sinking tankers and oilers was a task at which their U-boats were most proficient.

On May 20, 1919, the people of Ponta Delgada again did honor to men of the American Navy. On that day ships in the harbor were dressed, the town decked in flags, and there was general rejoicing at the arrival of the aviators on the first trans-

Atlantic flight. A salute of twenty-one guns was fired by the Portuguese battery, and the Governor of the Azores and the Mayor of Ponta Delgada gave official welcome to Commander J. H. Towers and the officers and crews of the "Nancys," as those famous planes were called.

The Azores formed the central point in the flight from the United States to Europe. It was the evening of May 16, 1919, when the three giant planes swung out from Trepassy, Newfoundland, on the long "jump" to the Azores, a distance of 1,380 miles. When the goal appeared to be near, the worst foe of navigation appeared. A dense fog all but blinded the pilots, endangering the success of the flight and putting the lives of the flyers in peril. The NC-4 managed to ascend above the fog, and 15 hours and 13 minutes after leaving Newfoundland arrived at Horta, the emergency stop in the Azores, and after a delay of three days, due to bad weather, flew to Ponta Delgada. The NC-1 was forced to descend to the water 45 miles from the island of Flores, and half an hour later the NC-3 also descended not far from Fayal. Disabled by heavy seas, the NC-1 sank. Nothing was heard from the NC-3 for more than two days. Many people feared that she was lost, and there was general rejoicing when, after fifty-three hours on the water, drifting and taxiing 209 miles, she reached Ponta Delgada.

Early in the morning of May 26th, Commander Albert C. Read and his crew departed on the NC-4 for the 891-miles flight for Lisbon, carrying the good wishes of the people of the islands. Lisbon did honor to the fliers, who had made a new world record. Bells rang, whistles blew, and the guns of the shore batteries boomed as the thousands lined the water front to welcome the aerial voyagers. Portuguese in Lisbon as well as in the Azores took the deepest pride in the achievement of the great adventure.

CHAPTER XXVI

TO VICTORY ON A SEA OF OIL

ABILITY TO SECURE OIL AND TRANSPORT IT TO EUROPE WAS ESSENTIAL TO SUCCESS—OUR NAVY PATROLLED CARIBBEAN AND GULF COASTS—TRANSPORTED MATERIAL AND FURNISHED PERSONNEL TO LAY PIPE LINE ACROSS SCOTLAND—AMERICA FURNISHED EIGHTY PER CENT OF OIL FOR ALLIED FORCES.

"THE Allies floated to victory on a sea of oil," was the epigrammatic way in which Lord Curzon expressed the truth that oil was essential for success in the World War. This was true particularly of the Navy's part in the war, for most of the naval force and the Shipping Board's ships were oil burners. That oil was necessary also for the army was emphasized when General Foch warned that "interruption of the petroleum supply would necessitate an entire change of campaign and if long continued might result in the loss of the war."

Long before 1914, Great Britain had felt dependence upon Mexican oil for its increasing oil-burning navy, and had made provision for securing it through acquisition of Mexican oil fields. American captains of industry had likewise large oil fields in Mexico. From the minute war was declared in 1914, Allied dependence was upon Mexican and American oil. Tampico and Port Arthur were strategic points in all Allied plans of campaign on sea or land. If this supply of oil had been interrupted, the war might have gone on much longer.

From the day the first German raider sank a British ship or a submarine fired at an Allied vessel, the British and French were zealous to protect the oil supplies in Mexico. They maintained patrol vessels in that region and kept ceaseless vigil of sea routes to protect this priceless agency of war. However great their need of ships on their own coast, they knew that if the oil supply failed at Tampico they would lose the only adequate available source of oil for all their operations.

The question has sometimes been raised why the Navy Department did not immediately upon the declaration of war send every patrol ship into European waters. One answer is Oil.

Before the United States entered the war, sensing, as the authorities did then, that oil might determine the outcome, a naval squadron, first under Admiral Wilson and afterwards under Admiral Edwin A. Anderson, was organized for patrol service in the Gulf and Caribbean as well as in the North Atlantic. Why? Again the answer was Oil, with a big O. The United States was importing millions of barrels of oil from Mexico for its own ships and industries. It could not permit any danger of cessation of this supply. Our dependence would be heightened when we entered the war. Gasless Sundays and other methods of conservation were practiced later in order that the Army and Navy in Europe might be well supplied.

At one time the sinking of the tankers was serious enough to alarm the Allied navies. The maintenance of fleets of Great Britain and America in the North Sea was dependent upon oil supplies, and always the U-boats were on the watch to torpedo oilers. They were so successful and the number of tankers was so small, compared to the need, that the American and British naval administrations decided to construct a pipe line across Scotland as the best new way to lessen the danger of losing tankers and to hasten the delivery of oil to the Allied fleet in the North Sea.

The Bureau of Navigation will enroll a force to lay the pipe line (Glasgow, Scotland) to consist of seven officers and one hundred men experienced in pipe line work. All material expense to be borne by British Government and personnel expense by United States Government.

That was the order I signed, April 5, 1918, in pursuance of which the Navy undertook to furnish the personnel, and, coöperating with the British, lay a pipe line across Scotland, thirty-six miles in length, following the course of the Clyde and Forth Canal, extending from Old Kilpatrick (St. Patrick's birthplace), to Grangemouth, Firth of Forth. Directions were also given that pipe and other material should be transported in American naval vessels. Priority orders were given by me for

the material in order to expedite shipment and construction, and as soon as the necessary material was ready the naval force embarked and carried out the work under Commander W. A. Barstow. The pipe line was laid out by Mr. Forrest Towl, president of the Eureka Pipe Line Company, New York, and the naval personnel was able to complete the work in four months.

There were two intermediate pumping stations, and fuel oil could be pumped in a cold state at the rate of 100 tons per hour. At the Old Kilpatrick terminal sixteen large tanks were constructed, each with a holding capacity of 8,000 tons. At the opposite end the oil was pumped into large reservoirs, easily accessible to oil-burning ships at Grangemouth and Forth ports.

The U-boats seemed, as I have stated, to have some uncanny way of finding and sinking tankers carrying oil to Europe. When unable to hit transports and cargo ships, their aim at tankers seemed unerring, particularly when the ships were going around the north of Scotland to carry oil to the fleet in the North Sea. And oil was more valuable to the fleet than radium. In fact it was the prime essential. The construction of the pipe line became a pressing war need for three reasons:

1. To reduce the sinkings of tankers proceeding around the north of Scotland or up the English channel.

2. To secure quicker trans-Atlantic voyages by eliminating the necessity of the tankers going into the North Sea.

3. To increase the flexibility in the distribution of reserve stocks between the west and east coasts, and vice versa.

Its completion secured a continuous and adequate supply of fuel oil for the naval vessels operating in the area it served. The building of this pipe line appealed to the Navy Department. As soon as the plans were ready, the order, "Push it!", was sent to every bureau which could assist in hastening construction and furnishing the officers and men. The order was obeyed.

When the formal opening of the line was celebrated a telegram of thanks was sent to American Naval Headquarters at London. Admiral Tothill, the British Fourth Sea Lord, who turned on the steam that started the pumps going, in his speech stated that this line, the longest in Great Britain, had been completed in about six months time from placing of order in the States, and that the U. S. Navy had in that time enrolled

a special unit to lay the pipe, and completed the work in a much shorter time than had been expected.

In his report Commander Barstow said that "during the past year the Allied governments' requirements amounted to 2,900,000,000 gallons, of which large total the United States has furnished 80 per cent, or about 2,320,000,000 gallons." The fact that eighty per cent. of the oil required had to be transported across the Atlantic shows the importance of the pipe line across Scotland which our Navy had a large part in constructing, and equally proves the value of the patrol of the Caribbean and Gulf Coast by our squadron in those waters.

In March, 1913, in answer to a letter from the Navy Department as to whether the Navy would be justified in constructing all its ships as oil burners, the Secretary of the Interior advised that the Geological Survey's estimates of the available source of oil showed that it was ample. The policy of "all oil-burners" was adopted by the Navy in 1913 and, when it was organized, the Shipping Board adopted the same policy. It was found that four ships burning oil will do the work of five ships burning coal. From the coal mine to the fire-room the use of oil saves fifty men per ship. Oil is the super-fuel. It does effectively and economically all that coal can do, and more. Its use makes possible the highest service of the two hundred and seventy-five destroyers built or contracted for during the war.

Foreseeing the larger use of oil for naval purposes, in the latter part of 1912, President Taft withdrew certain lands in California from public exploitation and set this land aside as Naval Reserves, No. 1 and No. 2. On April 30, 1915, President Wilson issued an order setting aside Naval Petroleum Reserve No. 3, in Wyoming. The preservation of these reserves intact for naval use is of such importance that the Government has fought the many adverse claims and refused the persistent applications of claimants and others to open wells on these reserves. It will soon be recognized that the nation which controls the oil supply of the world has an advantage in naval operations and in the carrying of water-borne commerce which will give it supremacy. The Navy Department appreciated this fact in 1913. After the war it recommended that this Government take steps not only to keep a large reserve of American

oil stored in the ground but also to acquire wells in every part of the world where oil is produced.

The contest for oil is a contest for supremacy of the sea traffic and naval superiority. Naval need of oil and the need for a large merchant marine, demand that the United States Government shall adopt a new policy touching oil and other national resources. We have been so wasteful of resources as to endanger national strength. It required the World War to teach us the importance of large production of oil, and of tankers and storage in all parts of the world.

CHAPTER XXVII

EDISON—AND 100,000 MORE

FLOOD OF SUGGESTIONS AND INVENTIONS OFFERED, MOST OF THEM TO DOWN THE U-BOATS—"FIND THE SUBMARINE" WAS THE PROBLEM —BEST DETECTION DEVICES DEVELOPED IN AMERICA—NEW WEAPONS OF WAR—THE NAVAL CONSULTING BOARD AND ITS GREAT WORK—SOME AMUSING SUGGESTIONS.

ONE hundred thousand suggestions and inventions were offered the Navy for winning the war. Four-fifths of them were designed to down the submarine. They poured in upon the Department in floods, evidence that American genius was mobilized along with man-power. Letters came in by the thousand, plans and models by the hundred. All were examined, and those that gave promise were tested.

The creation of the Naval Consulting Board, headed by Thomas A. Edison, in 1915, made the Navy the natural center for war inventions. While many did not prove practical and others were in process, a considerable number of important inventions were completed and proved of the highest value. A notable instance was the development of means for detecting submarines. In this America led the world.

When these devices had been perfected and thoroughly tested out on this side of the water, Captain R. H. Leigh was sent to England with a staff of naval officers and civilian experts; and ten tons of apparatus, to be tried out in British waters. Three trawlers, the *Andrew King, Kunishi,* and *James Bentole,* were equipped at the Portsmouth dock yard, and on December 30, 1917, accompanied by a speedy "P" boat, they steamed out for "listening patrol" in the English channel. Mr. C. F. Scott, one of the civilian engineers who accompanied Captain Leigh, said:

The day after New Year's we received a wireless from an airship that a submarine had been sighted. We steamed over, got our devices out, but couldn't hear a thing. Another message from the airship

changed the "sub's" position, so we altered our course and obtained a clear indication from the listening devices. The Hun was moving slowly up the Channel, submerged.

We gave the "P" boat a "fix" (cross bearing) on the spot where our indication showed the submarine to be. She ran over the place, dropping a "pattern" of depth charges, and soon we began to see tremendous amounts of oil rising to the surface. Evidently our first experience was to be successful. How successful we did not learn until afterward.

A trawling device had been developed which indicated whether contact with a submarine had been made. After the oil came up, we got out our trawling device and ran over the area for about an hour and finally got an indication.

We threw over a buoy to indicate the spot and anchored for the night, as it was getting dark. Next morning we trawled again and got another contact within a hundred yards of the buoy. We had destroyed a submarine in our first test, and the "sub" was given out by the Admiralty as a "probable." [That is, probably sunk.]

Many detection devices had been tried out and proved failures, but the American apparatus was so successful that the British ordered them for their own vessels. Thousands were manufactured, and our sub-chasers sent abroad were equipped with them. In December, 1917, it was estimated that at times two to five U-boats had passed through the English Channel in a day. After July 1, 1918, when patrol ships were equipped with the improved listening devices, only one enemy submarine is known to have passed through the Channel. Blocking the entrances to Zeebrugge and Ostend, the Dover patrol and the better mine defenses are to be credited with the larger part of this. But considerable credit is due to these "listeners," whose ability to locate under-water craft greatly increased the hazards of U-boats, especially in narrow waters.

The listeners also proved decidedly effective in high waters, off the French coast, in the Adriatic, the Mediterranean, and wherever they were used. They compelled the U-boats to change their tactics, and remain motionless for hours, fearing that the slightest movement of their propellers would disclose their presence.

Our submarine force began listening tests off Pensacola, Fla., in January, 1917, using privately-invented apparatus which gave such promise that an experimental station was estab-

lished at Nahant, Mass., the General Electric, Submarine Signal, and Western Electric companies coöperating with the Navy Department and Naval Consulting Board.

The Consulting Board had created a special Experimental Committee headed by Mr. Lawrence Addicks, and on March 3 held a "Submarine Defense Conference" at New York, which was addressed by Admiral Sims, then president of the Naval War College; Captain J. K. Robison, of the Newport Torpedo Station, and Commander Yates Stirling, Jr., in charge of our submarine base at New London, Conn.

Scientists and naval officers engaged in this work held a conference in my office in the Navy Department on May 9, and two days later I created a Special Board on Anti-submarine Devices, with Rear Admiral A. W. Grant as chairman, and representatives of the electrical and signal companies, and the National Research Council as advisory members. Extensive experiments were carried on at our submarine station at New London, as well as at Nahant.

Magnetic, electrical and other apparatus having proved impracticable, attention was concentrated on listening devices. The British had been experimenting with various inventions of this nature, but none had proved very effective. The first successful listening device produced in America was the "C" tube, an application of the binaural principle—that is, hearing through both ears—which was developed by Dr. William D. Coolidge. Next was the "K" tube, developed at Nahant, an adaptation of the rotary compensator devised by Prof. Max Mason at New London, with microphones, enabling the device to be towed several hundred feet astern of the listening vessel. Subsequently the combined work at Nahant and New London resulted in production of the "Y" tube, "Delta," "O S," and "O K" tubes, all modified forms of the "K" tube, for installation on vessels of different types.

Submarine chasers were equipped with these tubes, the first of which was developed by August, 1917, and a thorough test was made with American submarines, which were easily located. But much depended on the acuteness of the operator, and a school to train "listeners" was established at New London. Phonograph records of the sound made by various craft were

prepared, and used in the school for listeners, who soon became experts in determining direction, distance, type of vessel and speed at which it was moving.

"Find the submarine," was the problem when we entered the war, and this was the purpose of the listening devices. Once located, the "sub" could be destroyed or damaged by the depth-bomb. Before its advent there was no way of reaching the U-boat, once it submerged. The story is told that a British vessel chased down a "sub," which dived and remained stationary right under its pursuer. Down below them in the clear water, the Britishers could see the enemy plainly. "If we only had some sort of bomb that we could shoot down into the water, we could blow that Fritzie to Kingdom-come," an officer remarked. The general idea of the depth-bomb had long been known, and was then given its practical application.

The first ones, designed by an officer in the Admiralty, were crude affairs, metal cylinders like ash-cans. They were, at first, not very reliable, but by development they became the most effective weapons used against under-water craft.

The United States Navy developed depth-bomb tactics vastly superior to any before in use. Instead of half a dozen bombs, our destroyers carried fifty. The old method of releasing from the stern was superseded by the "Y" gun, which hurled the huge charges with greater accuracy and less risk to the vessel firing. Instead of dropping one or two, the depth-charge barrage was devised, bombs being fired in "patterns" all around the vicinity of the submerged boat, as well as over the spot where it was believed to be. That was one reason the destroyers proved such a terror to the "subs," which, as a rule, on sighting one of these swift warships ducked or ran away.

Gunfire, tellingly effective against submarines as long as they were on the surface, was ineffective the moment they submerged, as the ordinary sharp-nose shells were deflected and ricocheted as they struck the water. Our ordnance experts had already devised a non-ricochet shell, a "flat nose" projectile which could be fired with considerable accuracy at a target under water. The first contract for this type of projectile was placed June 19, 1917, and deliveries began the next month. Rapidity in firing was increased by a twin-gun produced for

THE NAVAL CONSULTING BOARD AND THE NAVY DEPARTMENT CHIEFS

Front row, left to right: Assistant Secretary of the Navy Roosevelt, Hiram Maxim, Thomas A. Edison, Secretary Daniels, Peter Cooper Hewitt, William LeRoy Emmett, Arthur Becket Lamb.

SECRETARY DANIELS AND THOMAS A. EDISON

Inset, Secretary Daniels and Mr. Edison with Mr. William L. Saunders and Professor Max Mason, inventor of a submarine detection device, at a test experiment at New London.

destroyers, two barrels on a single mount, both aimed at one time and firing alternately.

Thus we had bombs and projectiles and quick-firing guns which would "get" the under-sea enemy, once it was located.

The paravane, an English invention, proved of great value in protecting ships from mines. Its "wings," spread out in the water, picked up mines; and its wires bore them away from the ships, where they could be exploded without danger to the vessel.

Mines played a big part in naval warfare. The Germans sowed the seas with them, and if the Allied mine-sweepers had not been so energetic and skillful, they might have been as destructive to shipping as the U-boats were. Our Bureau of Ordnance led in mine development, and the new mine, called "Mark VI," which it produced in 1917, was decidedly superior to any of its predecessors, and was the type used by us in the North Sea Barrage.

Better guns for aeroplanes was a vital need. Machine-guns were made more effective; but for anti-submarine warfare there was needed something of larger caliber, with sufficient power to penetrate the hull plating of the U-boat. An aeroplane "cannon," the Davis non-recoil gun, was produced.

A 37-millimeter automatic cannon was being developed, as well as a three-inch gun for the larger type of dirigibles. Aerial bombs were improved and enlarged until they reached a weight of 550 pounds, with 190 pounds of explosive, the largest type being 15 inches in diameter and over 62 inches in height. Various experiments were made in launching torpedoes from planes, and torpedo planes were designed to accompany the fleet.

Night firing, naval experts realized, could be made much more effective by some method of illuminating the area around enemy ships without disclosing the position of our own. This was solved by "star" shells. Fired at long distances and exploding high in the air, these shells light up a considerable area, bringing out in bold relief the vessels beneath.

Range-finding and fire-control devices were improved, increasing the efficiency of large and medium caliber guns. "Smoke boxes" were manufactured by the thousand and placed aboard merchant as well as naval vessels, so that in case of attack they could make smoke screens.

So many new devices were developed that it would take volumes to tell of them all. Though thousands of the suggestions made were impracticable, not a few were of decided value, and the result as a whole was fresh proof of the never-failing inventiveness and genius of Americans.

When the Navy Department, in 1915, was planning its large program of construction, and seeking for new weapons and new strategy to combat the submarine, I was convinced that it would be of great assistance if civilian scientists and inventors could be induced to give the Navy the benefit of their experience and ability. This resulted in the creation of the Naval Consulting Board. On July 7, I wrote Mr. Edison inviting him to become the head of the Board, saying:

> One of the imperative needs of the Navy, in my judgment, is machinery and facilities for utilizing the natural inventive genius of Americans to meet the new conditions of warfare as shown abroad, and it is my intention, if a practical way can be worked out, as I think it can be, to establish, at the earliest moment, a department of invention and development to which all ideas and suggestions, either from the service or from civilian inventors, can be referred for determination as to whether they contain practical suggestions for us to take up and perfect.
>
> We are confronted with a new and terrible engine of warfare in the submarine, to consider only one of the big things which I have in mind; and I feel sure that with the practical knowledge of the officers of the Navy, with a department composed of the keenest and most inventive minds that we can gather together, and with your own wonderful brain to aid us, the United States will be able, as in the past, to meet this new danger with new devices that will assure peace to our country by their effectiveness.

Upon Mr. Edison's acceptance—he was the first American chosen by selective draft—each of twelve leading scientific societies was asked to name two representatives to compose the membership of the Board. Most of them were eminent in scientific research or the development of useful apparatus. This was the first civilian organization of a war character which was created. Because of the personnel of its members, it aroused wide interest.

The Board was composed of Thomas A. Edison, president; William L. Saunders, chairman; Benjamin B. Thayer, vice-chairman; Thomas Robins, secretary; Lawrence Addicks, Bion

J. Arnold, Dr. L. H. Baekeland, D. W. Brunton, Howard E. Coffin, Alfred Craven, W. L. R. Emmett, Peter Cooper Hewitt, A. M. Hunt, M. R. Hutchison, B. G. Lamme, Hudson Maxim, Spencer Miller, J. W. Richards, A. L. Riker, M. B. Sellers, Elmer A. Sperry, Frank J. Sprague, A. G. Webster, W. R. Whitney, and R. S. Woodward. Admiral William Strother Smith was named as special representative of the Navy Department. All bureau chiefs and other naval experts worked in coöperation with the Board.

With its technical talent, the Board began at once a survey of the industries of the country, having effected an organization in every state, with five technical men in each as advisory members. These field aids, giving their services free, went into industrial plants throughout the country, listing all machinery and machine tools suitable for war service, and the men competent to serve in shops. That gridiron organization functioned perfectly. This information of the manufacturing resources of the country for public service in case of emergency was the first that had been collected. The Navy had taken a census of the ships and the Army knew of munition plants, but it was this survey of industrial material and services which later formed the basis for the big production work of the two military departments and the War Industries Board. This was real preparedness—and it was begun in 1915. Before England went into the war, it had prepared no record of skilled labor suitable for war work. The result was that many men hastened to the front whose services were far more valuable in munition plants. The inventory taken by the Naval Consulting Board, completed in five months, enabled our country to avoid that mistake. It made it comparatively easy, when war came, to retain skilled men where they counted most, and enabled factories to swing from their regular line of production to Army and Navy work.

The card indexes, prepared with thoroughness, showed the concerns that were working on military orders for foreign governments. It was ascertained that 35,000 concerns in the United States could manufacture war material, and the names, location and facilities of these plants were docketed. The Board pointed out, what afterwards became generally recognized, that the manufacture of munitions was a parts-making business. Parts

made in Toledo, Ohio, must fit those made in Portland, Oregon, or Augusta, Georgia, and all these parts must fit each other to the hundredth part of an inch. Over 500 concerns manufactured parts of the Mark VI mine. When the Council of National Defense was established, it took over the data and organization, and requested the Naval Consulting Board to act as the official Board of Inventions for the country.

After the experiments at Nahant, which followed the March meeting, in 1917, in company with Mr. Edison, Mr. William L. Saunders and others of the Consulting Board, I visited New London. We took a sea trip on a submarine-chaser equipped with listening devices. It was a matter of gratification to both civilians and naval men to witness personally the success of submarine detection, and to feel that their faith and experiments had been rewarded.

Ship protection was the subject of constant study, and various methods—camouflage, armament, smoke-boxes, submarine and torpedo detection, plans to prevent and withstand attack and increase buoyancy—were studied by the Consulting Board. It was through that board that the naval research and experimental laboratory, now under way on the Potomac, below Washington, was established and the money provided through Congressional appropriation.

Mr. Edison spent most of his time during the war—practically all of it—either on board the *Sachem,* which had been fitted up for his special use, or in his office in the Navy Department at Washington. I was in intimate touch with him. It was a revelation to go into his chart-room and talk to him about his study of the lanes of the sea; to see his maps studded with pins pointing out where sinkings were most frequent, and to obtain his advice as to the routing of ships to lessen the probability of attack. An authority on many other subjects, he learned much about troop transportation, the routing of merchant ships and their quick turn-around, and avoiding U-boats by changing routes.

One of his most successful and yet least known of his experiments was in the detection of torpedoes. The Wizard of Menlo Park was most modest in his claims. To a lady, enthusiastic over what she called his inspiration, Mr. Edison is reported to

have said, "Madam, it is not inspiration, but perspiration." In a letter to a sub-committee of the Senate, when some one had attributed the success in detecting submarines to Mr. Edison, he wrote:

> I never worked or pretended to work on the detection of submarines. All of my work in this general direction was confined to the detection of torpedoes and to the quick turning of cargo boats ninety degrees in order to save the boat from being torpedoed.
>
> I was successful in both. With my listening apparatus, and while my boat was in full speed, I could hear a torpedo the instant it was fired nearly two miles away, and with my turning device, a 5,000-ton cargo boat, fully loaded going at full speed, was turned at right angles to her original course in an advance of 200 feet.

Along with the hundred thousand suggestions of how to win the war, there were not wanting incidents out of the ordinary. One day as I was discussing department business with a bureau chief the telephone rang, and a clerk said "long distance" was calling. He did not catch the name clearly, but thought it was Mr. Ford. I found in a moment that it was not the famous Detroit automobile maker, for the man at the other end of the line began talking a blue streak, starting out with the declaration: "I've invented a thing that will wipe out the submarines; I've got something that positively will end the war." He seemed quite excited about it. I asked him what it was. He said he could not tell me over the phone, or entrust the secret to mails or telegraph.

"Send it to our Inventions Board," I suggested.

"Not on your life," he replied. "They might steal it, and I'd never get the credit for it. It's worth millions, millions!"

He would never show it to but three people, he said, the President, Mr. Edison and myself, and all three must give the pledge of secrecy.

"There's not a moment to be lost, and I want to bring it to Washington myself," he exclaimed. "But I must be careful. If the Germans knew I had this, their spies would murder me."

"All right, bring it on," I remarked, hoping to end the conversation before he had bankrupted himself with telephone charges.

"Send me $5,000 by telegraph this afternoon, and I'll start

tomorrow," he demanded. Used as I was to queer propositions, this did rather startle me. "No, no," I replied emphatically; "I cannot do that."

"Do you mean to say,"—he seemed to be surprised—"that you won't send me a measly little $5,000 when the thing I have is worth millions, and will end the war?"

"That's correct," I said, rather sharply, I fear. "We will not send anybody a dollar of Government money until we know what it is for."

"Well, that's the smallest piece of business I ever heard of," he snapped. "I thought you were some Secretary, and now I believe all the mean things some newspapers have said about you."

One of my office aids figured out that this irate citizen had spent about $20 in telephone tolls. We never heard from him again, and the invention that would end the war was lost to the world.

The sturdy police that guarded the portals of the State, War and Navy building stopped at the entrance a tall, lean man who was lugging a box about as big as two suitcases. They ordered him to open it, and found inside a concern that looked as if it might go off at any moment. He wanted to see somebody in the Navy Department, and one of my aids went down to investigate. The fellow did not look like a spy or plotter, and the Navy man asked him what his contraption was.

"It's a porcupine boat," he said, "a boat that'll keep off them torpedoes that the submarines are firin'."

It was a model of a boat, its wooden sides thickly studded with long spikes.

"What's the idea?" he was asked.

"Well, you see, the torpedoes can't sink a ship unless they hit her," he explained; "and if you put these long spikes all along the side, they can't get to her. The spikes will stop 'em; the torpedoes are stuck before they hit the boat—there you are."

It was a great idea; certainly no one else had thought of it. But as the spikes would have to be about forty or fifty feet long to hold off the torpedoes, and each ship would have to have a thousand or two of them, we could not very well adopt the invention.

A Southern inventor brought forth a plan that would have brought joy to the Sunny South, if it could have been adopted. This was to sheathe all ships with an armor of thick cotton batting. He evidently got his inspiration from the battle of New Orleans, where doughty old Andrew Jackson erected a barricade of cotton bales which the British shells could not penetrate. So a century later this Jacksonian figured that a ship swathed in cotton would be immune from shell or torpedoes. The Germans could fire away, and do no more harm than if they were throwing rocks at a mattress. But unfortunately the naval experts seemed to have their doubts about the efficacy of cotton-batting armor, preferring to stick to steel.

"Lick the enemy before he lands!" was the slogan of an earnest soul who was designing a submarine that would carry from 200 to 400 torpedoes. If necessary, in the midst of a foreign fleet, he told us, they could "unload the whole 400 in from four to eight minutes, according to the number of men on duty to let them loose."

He also had "some very good ideas for warships," one of which was to turn our old battleships into floating forts with 16-inch disappearing guns. Attached to each vessel would be a sloping steel shelving running into the water, a great plough that would turn the other fellow's shells and scoop up torpedoes as if they were watermelons. "You could just sit up on deck," he said, "and laugh at a hundred of them sending torpedoes."

An airship that would sail from here to Germany, blow up Berlin, and keep right on around the world, manufacturing its own fuel as it went along, was another suggestion.

One citizen had a remarkable mine-catcher which, he said, "misses none; it sees and feels for you and catches all, if the sea is strewed with mines." He offered to sell his model for only $250,000.

We were offered an automatic field-gun that, placed in Washington, could be operated by electricity from Texas. One man could operate a thousand of them, the inventor claimed. Placing these guns all along the German lines in France, the operator, seated at his switch-board in Paris, could play on the keys like a typewriter, spraying the Teuton lines with deadly missiles from Ypres to Verdun.

Another scheme was to put guns on top of all the skyscrapers in New York to ward off aerial attack; and to build a machine that would gather all the electricity in the metropolis, and project it by wireless far to sea, sinking hostile vessels as if they had been struck by lightning.

Mobilizing the dogs of America, sending them to France and "sicking" them on the Germans was a proposition that might not have appealed to dog-lovers so much as to the ferocious fighting men who wanted to bite the Germans and "eat 'em up."

Mechanical soldiers capable of marching, fighting and capturing man soldiers were proposed. You would only have to fill them with ammunition, wind them up and let them go.

The German fleet at Kiel could have been easily destroyed, if the floating torpedo suggested had been a success. Its originator proposed to launch them in channels when the tide was going in, let them float into the German harbors and blow up everything afloat.

These absurdities gave a touch of humor to the arduous task of developing new methods and inventions—a task well performed by the naval experts, civilian scientists and inventors who so patriotically devoted their time and talents to the winning of the war.

CHAPTER XXVIII

BUILDING A THOUSAND SHIPS

SIX HUNDRED MILLION DOLLARS FOR DESTROYERS—"WARD" LAUNCHED 17½ DAYS AFTER KEEL WAS LAID—"REID" COMPLETED IN 45 DAYS—GREAT DESTROYER PLANT BUILT AT SQUANTUM—PATRIOTS IN OVERALLS—WHY WERE NOT MORE DESTROYERS BUILT BEFORE THE WAR?—NEW NAVY WILL SURPASS ALL OTHERS—REDUCTION OF ARMAMENT.

"DESTROYER *Ward* launched seventeen and a half days after laying of keel," was the message from Mare Island Navy Yard that announced a new world's record in ship construction.

In pre-war days from twenty months to two years had been required to build a destroyer. Now they were being completed in a fraction of that time. All the yards were working at top speed, far excelling any previous accomplishments, but Mare Island had set a new pace hard to equal.

"Liberty Destroyer," the *Ward* was designated, and the way in which she was put through was like a continuous Liberty Loan rally. "This destroyer is needed to sink Hun submarines; let all hands help sink them," was one of the numerous placards posted around her. Each day's progress was marked on the big canvas banner stretched above the bow. In twenty-four hours she began to assume shape. In two weeks they were putting the finishing touches to the hull, and the banner read:

LIBERTY DESTROYER No. 139

Keel Laid May 15th
Will be Launched June 1st

14 DAYS OLD TODAY

SHE'S SOME BABY

Three and a half days later, she was sent down the ways. As she slid into the water, officers and workmen cheered as they had never cheered before.

This was the quickest time in which a vessel had ever been launched. But the record for completion—the *Ward* was commissioned in 70 days—was later bettered at the great Victory Plant at Squantum, Mass., where the *Reid* was finished and made ready for her trials in 45½ working days.

Before war began we ordered scores of destroyers, and soon afterwards contracted for all that American yards could build. But we wanted more. The question was how to get them. The Navy Department, after conferring with one of the leading shipbuilders, determined on a bold stroke. All the contractors, those building engines and machinery as well as hulls, were summoned to Washington, and met with the Chief Constructor and Engineer-in-Chief of the Navy in my office. "One hundred and fifty more destroyers must be built," they were told. That proposition was a "stunner." They had already contracted to build every one for which they had facilities. And here was a demand that more than as many again be constructed. Some shipyards would have to be enlarged, some new ones built. The same was the case with engine manufacturers, and producers of forgings; for producing enough engines was quite as difficult as building hulls. Where companies could not finance additions, we agreed that the Government would build them, as well as the new factories or yards. Even at that, it was a staggering proposition. But the contractors were game and patriotic. They promised every coöperation and with the Navy experts began working out the thousand details involved.

Congress was asked to appropriate $350,000,000 more for destroyers, to build new plants required, as well as for ship construction. When the bill was passed, October 6, 1917, the plans were ready, contracts were signed, and the enlarged program was under way. Ground was broken at Squantum the next day, October 7. Thousands of laborers were at work, dredging, draining, making roads, driving piles, erecting buildings, transforming that marsh into a fit habitation and working-place for 10,000 men. Buildings sprang up like magic. One concrete, steel and glass structure three stories high and 200 feet long was finished in two weeks. When winter came on, the laborers had to use picks and shovels to dig through the frozen clay to lay foundations, and all the workmen were handicapped by the

bitter cold. Concrete poured hot—and thousands of tons were used—had to be protected by masses of hay and sheets of canvas, with heated air circulating inside to keep it from freezing. But the work never halted, and in spite of all handicaps, was completed in record time.

There were eighteen acres of shipyards covered by one continuous roof; the arrangements being so complete that raw material went in at one end and destroyers slid out at the other. There were hundreds of buildings, not a few of them covering one to three acres. There were enough ways for ten destroyers, and a score could have been under construction at the same time.

Six months after ground was broken I had the privilege of witnessing there the laying of the keels of five destroyers in one day.

The building of Squantum was rivaled by the erection of the big plants at Erie, Pa., to make forgings for destroyer shafts and turbines; the plant at Buffalo and by other feats of construction that would be difficult to excel. All were erected and in operation in half the time they could have been completed under ordinary conditions.

Our construction program embraced practically a thousand vessels—275 destroyers, 447 submarine-chasers, 99 submarines, 100 eagle boats, 54 mine-sweepers, and a number of gunboats and ships of other types. All these in addition to the capital ships and scout cruisers authorized in the three-year program. Though some contracts were cancelled after the armistice, all but 100 or so of these vessels were built, nearly 500 completed before the end of hostilities. In addition 1,597 privately-owned vessels, ranging from small patrol craft to huge transports, were converted by the Navy for war purposes.

Over 2,000 vessels were in naval service before hostilities ended—six times as many as were on the Navy list when war was declared. How was it possible, in a country where shipbuilding had declined until it was "a craft and not a trade," to build and alter and repair all these ships, and also to provide munitions and build great establishments ashore on both sides of the sea?

It was made possible by the foresight of Admirals Griffin and Taylor and their associates, who before the war had made

designs for building various types of ships and for converting the ex-German vessels and privately-owned craft suitable for war service. I wish the whole country could know the true value of the work of these able officers and their naval and civilian assistants. But for their forehandedness and ability, our Navy would not have been able to have rendered such prompt and valuable service. Great credit is due, alike, to the shipbuilders who carried their plans into effect, devoting their talents and untiring efforts to further warship construction.

It was also because the 100,000 mechanics and workers in navy yards and naval plants, and the many more in private plants, who, with patriotic naval and civilian experts, worked as never before. Many of these "patriots in overalls" sacrificed their desire to enlist when told that they could do more to win the war by driving rivets, fashioning guns or making munitions. Labor was whole-heartedly in the war, and would not tolerate slackers in production or in service. In the heat of summer and the cold of winter, they rushed construction and astonished the world by the celerity with which American skill and industry turned out ships, weapons and supplies. On every war board labor had its representative—in the Cabinet as well—and its patriotism and unity made for a united and efficient America. The Navy and other war agencies found the militant spirit and wise counsel of Samuel Gompers worth a regiment of fighting men.

The Navy did not wait for war to begin building ships. When the program for 156 vessels was proposed in 1915, without awaiting congressional action, work was begun on plans so that on the very day that the bill became a law the plans and specifications were issued for 20 destroyers, 27 submarines, 4 dreadnaughts and 4 scout-cruisers. Contracts were placed for their construction as soon as the bids were received. "Such speed," said Admiral Taylor, "was without precedent in the history of the Navy Department. It was the result of the persistent insistence by the Secretary of the Navy that work should be pushed and his loyal support in this respect by bureaus concerned. There was no procrastination or dilatoriness in the largest undertaking ever entered into by the United States Navy, and the most important from the point of view of prepara-

tion for any eventuality. While the large vessels of the program had to be suspended during the war, the destroyers were pressed."

Completion of the destroyer program gives the United States Navy 267 destroyers of the latest pattern, in addition to those of older type, which, in the emergency of war, rendered such good service. These destroyers have an aggregate of 7,400,000 horse-power, and they cost approximately $600,000,000, counting $40,000,000 spent for new plants and building ways. This sum is greater than the cost of all the ships of the Navy available for service when we entered the war. The record of our destroyers overseas won the admiration of Allied navies, and reflected credit upon Congress, the naval administration and the country.

But, in view of the need of thousands to patrol the seas in 1917-18, where we only had scores, it has been asked, "Why did not the Navy Department build hundreds of destroyers in 1915 and 1916 and have them ready in 1917?" Looking backward, all of us admit that was the thing that should have been done. No naval experts, however, either in Europe or America, recommended in pre-war days such a building program.

All European admiralties, as well as our own, regretted that they had not built more destroyers against the day when they were so much needed. In reply to an inquiry made by a United States senator, Admiral Sims said:

> If we could have imagined that the Germans would do what they did do we could have prepared for it and built destroyers galore, if we could have persuaded Congress to give us the money. Nobody had any experience with this kind of war at all, and nobody could be savage enough in his disposition to know what the Germans would do, and therefore to prepare for it; so that I would advise you to be a little gentle in criticisms of naval officers in general, because they were not prepared for this war, because we are a more or less civilized people.

After ruthless submarine warfare began, we contracted, as we have shown, for 275 destroyers, many more than any nation had ever attempted to build in anything like so short a time.

But destroyers were by no means the only anti-submarine craft we built. Realizing the usefulness of small craft, the Navy Department, in 1916, turned its attention to the utilization of motor yachts and other small power-driven vessels. Assistant

Secretary Roosevelt conferred with owners and builders, and an inventory of such craft was taken. He started a campaign to interest owners of yachts and motor boats and induce them to design their boats so that they could readily be converted to war uses. Naval architects and their clients were encouraged to submit their designs to the Navy Department. To give further impetus to the movement, two small boats were constructed as models.

Early in 1917, before war was declared, the Department's construction experts, under the leadership of Captain J. A. Furer, naval constructor, in coöperation with Mr. A. Loring Swazey, who later enrolled as lieutenant commander in the Naval Reserve, submitted to the General Board, in February, a design for those wonderful boats which became known as submarine-chasers. They were to be 110 feet long, with a speed of 14 knots and a cruising radius of 800 miles, armed with 3-inch guns, Y-guns for firing depth-charges, machine-guns and depth-bombs. The shortage of structural steel and of labor required for steel construction, necessitated building them of wood.

On March 19, 1917, orders were issued for building sixty chasers at the New York navy yard and four at the New Orleans yard. On March 21st orders were placed with private firms for 41 boats. Ten days later contracts were placed with private builders for 179 additional boats, and orders given for 71 more to be constructed at the navy yards at Norfolk, Charleston, Mare Island and Puget Sound, a total of 355, all ordered before war was declared. Fifty of these were, after completion, turned over to the French government. The French were so pleased with them that they ordered fifty more. A total of 447 chasers were ordered, and 441 were completed. Their service far surpassed expectations of designers and builders. Originally constructed for use in rivers and harbors and near home coasts, they crossed the ocean and became a reliance not only for patrol work but for offensive against the U-boats—chasing submarines.

In the three-year program, there was provision for 58 coast submarines, of which appropriations were made for thirty. On March 4, 1917, 20 additional submarines were provided for, and their construction was begun. The Portsmouth (N. H.)

navy yard had been made a submarine construction yard and the orders were divided between that yard and private contractors. Forty were completed before the armistice. We sent several submarines to the Azores and a number to British waters, where they operated from Bantry Bay. They gave an excellent account of themselves, one, the AL-2 being credited with causing the destruction of the German UB-65.

Having ordered all the destroyers and sub-chasers that could be built, other sources were sought to produce more anti-submarine craft. On December 24, 1917, I received a letter from Mr. Henry Ford proposing quantity production of fabricated boats, suggesting that at least 500 could be built, and saying: "We will undertake the construction of these boats with all possible speed, and deliver them to the United States Government without profit to us." I telegraphed him, suggesting that he send his engineers and construction men to confer with our designers. Captain Robert Stocker and his associates in the Design Division completed the plans and specifications in a few days, and they were submitted to Mr. Ford. On January 15 he made a definite proposal to build 100 to 500 of these vessels. I consulted with the General Board, and two days later telegraphed him to proceed with construction of 100. Later twelve additional were ordered for the Italian Government. They were to be of 500 tons displacement, 200 feet long, speed 18 knots, with a cruising radius of 3,500 miles. They were to be armed with two 4-inch 50 caliber guns, discharge projectors, anti-aircraft and machine guns.

These "eagle boats," as they were named, were built specifically to hunt submarines. For their construction Mr. Ford erected a special plant on the River Rouge near Detroit. Though only a few were in service before the armistice, sixty in all were built. The completion of 23 in one month in 1919 indicated that Mr. Ford was not far wrong in his original estimate that it was possible, when his plant got into quantity production, to turn out 25 per month.

"Eagles" went from New York to Inverness, Scotland, over a 4,500-mile course, and after they had steamed 11,500 miles officers confirmed their seaworthiness and their fitness for the task for which they were built. Several sailed to Arctic waters,

through fields of ice. They were used to maintain dispatch service between ports in Northern Russia, in which duty Admiral McCully reported they were very successful.

Orders for many mine-sweepers were placed early in 1917, their design permitting their construction by certain companies without interfering with the building of naval or merchant craft. Some were built at the Puget Sound and Philadelphia navy yards. The new mine-sweepers proved exceptionally seaworthy. Thirty-six were employed in sweeping the mines in the North Sea. In addition to the vessels designed and built for this purpose, we employed a fleet of privately-owned ships of all sorts and sizes, which were fitted out and used first as patrol and then as mine-sweepers.

While war was on, construction had to concentrate on destroyers and other anti-submarine craft. However, we completed two battleships, the *Mississippi* and *New Mexico,* and practically finished the *Idaho;* but work was suspended on capital ships that were not already far advanced.

Hostilities ended, attention was turned to the completion of the program authorized in 1916. Should we proceed with the dreadnaughts and battle-cruisers on the pre-war plans; or modify the plans, but still build two distinct types; or abandon the plans altogether and build a single type to do the work of both battleship and battle-cruiser? These were questions that addressed themselves to naval administration. Officers were debating them. From London came the information that the British Admiralty had built a capital ship, the *Hood,* a composite of the dreadnaught and the cruiser, which was said to combine the advantages of both.

After consultation with leading members of the Naval Affairs Committee, and upon their advice, accompanied by Admirals Griffin, Taylor and Earle, heads of the Bureaus of Engineering, Construction and Ordnance, I went to Europe to learn, at first hand, what changes, if any, war experience taught should be incorporated into the new ships to be constructed. An examination of the *Hood* by our expert officers disclosed that this new ship had more speed than earlier battle-cruisers, though less than that of our design; a heavier battery, though of only about half the power of that of our projected battleships;

FITTING OUT FOR DISTANT SERVICE

New destroyers built and equipped at a privately owned ship yard in Camden, New Jersey.

HANGING UP A RECORD

The launching of the destroyer *Ward* at the Mare Island Navy Yard 17½ days after her keel was laid established a new record.

and had protection much greater than that of earlier battle-cruisers.

Upon our return from Europe all the information gathered was laid before the General Board. Admirals Mayo and Rodman, who had recently returned from Europe, where they had been interested in the question, were invited to act with them. The General Board made a unanimous recommendation that the twelve battleships should be "completed as expeditiously as possible on present lines of development in battleship construction." In view of the importance of protection as indicated by experience at the Battle of Jutland, where thinly protected battle-cruisers were unable to stand up under heavy fire, the Board recommended that "the six battle-cruisers now authorized be completed as expeditiously as possible, but with additional protection, particularly to turrets, conning towers, magazines and communications, at the expense of a small reduction in speed." The recommendations were approved, and directions given to press their construction.

The new battleships under construction will be 660 feet long, with displacement of 43,200 tons, with an extreme breadth of 105 feet and a mean draft of 33 feet. Engines developing 60,000 horse-power will drive them at a speed of 23 knots. Their twelve 16-inch guns will be mounted in four turrets, which revolve so that all can be fired simultaneously to either side of the vessel. In a single salvo these guns will throw 25,000 pounds of projectiles. In every way they outclass any ships of the line ever built.

The six battle-cruisers will be larger than any war-ships heretofore constructed. Each will have 43,500 tons displacement, practically the same as the battleships, but will be longer by over 200 feet, their length being 874 feet, and they will be ten knots faster, making 33¼ knots, 38 miles an hour. No less than 180,000 horse-power is required to drive these immense vessels through the water. Their engines will develop as much electric power as is required to supply a good-sized city. The six battle-cruisers will have a total of 1,080,000 horse-power. Each will be armed with eight 16-inch guns, firing 16,800 pounds of projectiles. The weight of metal is not, however, nearly as important in gunfire as is the range. The guns of our battle-

cruisers will easily outrange those of any ships now afloat. Both battleships and battle-cruisers will be propelled by electric drive, the new method which, first installed on the *New Mexico,* proved its superiority, and was adopted for all our later major vessels.

With the completion of these eighteen capital ships, together with the scout cruisers and other types under construction, the Navy of the United States will be at least "equal to the most powerful maintained by any other nation of the world." That was the goal in view when the big three-year program proposed in 1915 was adopted by Congress in the act of August 29, 1916, to which, when this program is completed, the Navy will owe its supremacy.

It is a matter of gratification that the United States, which brought forth the steamship, the ironclad monitor, the torpedo boat, the aeroplane, the flying boat, has again taken the lead in naval construction and will soon have the most powerful of all armadas.

This country should keep that position for all time until—and unless—with a powerful navy and great national wealth, the United States succeeds in securing an international agreement to reduce armament. The very act making possible our supremacy on the seas, declared it to be the "policy of the United States to adjust and settle its international disputes through mediation and arbitration"; authorized the President to invite a conference of all the great governments to formulate a plan of arbitration and "consider the question of disarmament"; and declared that the ships authorized but not already under contract were not to be built if international reduction of armament could be secured.

That statement of policy in the naval appropriation act of 1916—"a most unusual place," said the President in an address at Seattle—was in line with the policy of the Government from the day of Wilson's inauguration. It was the authorization for the international agreement looking to a reduction of armament contained in the Treaty of Versailles. The Bryan treaties, ratified by every European country except Germany, which insured cooling time and opportunity for discussion in a world forum, were a long step toward settling international differences by

reason rather than by resort to war. It was about the time those treaties were proposed that Winston Churchill, First Lord of the British Admiralty, suggested a "naval holiday." In my first report in 1913, reiterated in every subsequent report, I declared: "It is not a vacation we need, but a permanent policy to guard against extravagant and needless expansion." I recommended then that "the war and navy officials, and other representatives of all nations, be invited to hold a conference to discuss whether they cannot agree upon a plan for lessening the cost of preparation for war" and added this observation:

> It is recognized that the desired end of competitive building, carried on under whip and spur, could not be effective without agreement between great nations. It ought not to be difficult to secure an agreement by which navies will be adequate without being overgrown and without imposing over-heavy taxes upon the industries of a nation.

Long before the match was struck by the assassination of the Archduke Ferdinand, President Wilson, Ambassador Page and Colonel House were taking steps which, if Germany had been willing and Great Britain and France had sensed the coming conflict, might have averted the World War. To that end in the early part of 1914, President Wilson sent Colonel House abroad with letters to the Kaiser and the heads of the British and French governments, with whom earnest conferences were held. President Wilson and his associates in 1913-14, as this shows, had the vision of world agreement for peace to secure which he and the representatives of other free nations signed the treaty in Paris in 1919.

"The last thing Germany wants is war," said the Kaiser to Colonel House, just three months before he precipitated the conflict. The Kaiser was obsessed at that time, so Colonel House reported, with the thought of what he called "the Yellow Peril." The Kaiser said: "The white nations should join hands to oppose Japan and the other yellow nations, or some day they will destroy us." That fear, or simulated fear, and his statement that Germany could not hastily join a peace pact so long as 175,000,000 Slavs threatened his empire, furnished the excuse for brushing aside the suggested agreement to prevent war.

Did he fear that President Wilson's tentative move early in 1914 toward a League of Nations for world peace would be successful? Was the Kaiser convinced that he must strike in that year, or surrender his mad ambition for world domination?

As these lines are written a conference of five nations, called by President Harding, is in session at Washington, where the discussion of reduction of naval armament was given first place in a proposal to scrap all pre-dreadnaughts and also the incompleted great dreadnaughts, and not to build or complete the battle-cruisers under construction. The plan presented by the American representatives is to adopt the ratio of capital ships for the United States, Great Britain, and Japan at five for the United States, five for Great Britain, and three for Japan. Such a program, if followed by scrapping all submarines and placing them in the category of outlaws, would, with reduction of land armament and regulation of aircraft, carry out the hopes of those responsible for the naval program authorized in 1916.

CHAPTER XXIX

MAKING SAILORS OUT OF LANDSMEN

HALF A MILLION RECRUITED AND TRAINED IN EIGHTEEN MONTHS—"ONE OF THE MOST STRIKING ACCOMPLISHMENTS OF THE WAR," SIR ERIC GEDDES DECLARED—NAVY'S EDUCATIONAL SYSTEM PAVED THE WAY—EVERY OFFICER A TEACHER—NAVAL ACADEMY GREATLY ENLARGED—NO SHIP KEPT WAITING FOR OFFICERS OR MEN.

HALF a million men and thirty thousand officers were enlisted and trained by the United States Navy in eighteen months. No navy in the world ever had as large a personnel, or ever attempted to raise and train as large a sea-force in so brief a time. Sir Eric Geddes, First Lord of the British Admiralty, said:

> The dauntless determination which the United States has displayed in creating a large, trained body of seamen out of landsmen is one of the most striking accomplishments of the war. Had it not been so effectively done, one would have thought it impossible.

When the Archbishop of York, Honorary Chaplain-in-Chief of the British Navy, visited Great Lakes, Ill., he was amazed quite as much by the spirit of the personnel as he was by the vast extent of the establishment, the largest naval training station in the world. The Archbishop reviewed the cadets in the administration drill hall, a structure large enough for three entire regiments to maneuver. Thirty thousand blue-jackets were assembled in the hall, with three full regiments, nine thousand men, and a band of three hundred pieces in light marching order. After the preliminary ceremony "to the colors," they passed in review before the Archbishop, playing and singing "Over There." The thousands massed in the center of the hall, sang "Columbia, the Gem of the Ocean." Profoundly moved, the Archbishop turned and said to Captain W. A. Moffett, the commandant, "Captain, now I know that we are going to win the war."

When, a few days later, he visited Washington, the Archbishop told me that the outstanding thing he had seen in America was the Great Lakes Training Station. "If I had not seen it," he said, "I could not have believed it possible that such a training camp for seamen could be conducted a thousand miles from the ocean."

Like expressions came from members of the various missions and naval officers who came to the United States. That station, situated in the heart of the country, far from the ocean, trained and sent into the navy during the war over one hundred thousand men. It was the vitalizing spirit of the Navy in the Middle West; a center of the patriotic inspiration which swept like a prairie fire and brought young men into the Navy more rapidly than we could house them. Two thousand five hundred enlisted men were under training there when war was declared and in that month 9,027 recruits were received. But Great Lakes never was swamped. No matter what strain was put upon it, the authorities were equal to any emergency.

Between April 6, 1917, and March 11, 1919, 125,000 men were received; 96,779 trained and sent to sea duty, and 17,356 graduated at its special schools. The camp grew to 1,200 acres, with 775 buildings. Nine great drill halls were built in which thousands could maneuver in regimental formation. But bigger than the number of men enrolled or the buildings erected or the great schools conducted was the spirit of the place. From the inspiring leadership of Captain Moffett, who was a genius at organization, to the youngest boy fitted out in naval uniform, pride in the station and the naval service was so contagious that it reached back into the homes from which the youths had come and stirred the whole Middle West with enthusiasm for the Navy.

In the early days of the war, Captain Moffett, who had come to Washington to discuss plans for enlarging the station, said to me: "Mr. Secretary, I have here a requisition for $40,000 for instruments for the Great Lakes band."

It had not been very long since $40,000 was the entire appropriation for the station. The captain's request seemed to me like extravagance.

"Do you expect to win the war, as the Israelites did?" I

asked, "by surrounding Berlin and expecting the walls to fall as every man in your band blows his trumpet?"

I demurred at first, but he pleaded for it with such eloquence that I signed the requisition. This enabled John Philip Sousa, enrolled as a lieutenant in the Reserve Force, to train fifteen hundred musicians, the largest band in the world. Bands were not only sent to ships and stations overseas, but toured the country, giving the greatest impetus to the Liberty Loan campaigns. These bands were an inspiration to the entire service. I found later that a British commission had reported that only three things were more important than music. These were food, clothing and shelter.

The three other great permanent training stations, Hampton Roads, Va., Newport, R. I., and San Francisco, were animated by the same spirit as Great Lakes. Their officers and men vied with each other in efficient training of recruits. The same was true of the temporary stations along the coast which came into being to give quarters and instruction to youths who enlisted so rapidly that provision had to be made for them at every available point.

Approximately 500,000 men and 33,000 officers were in the Navy when hostilities ended, and nearly nine-tenths of them had been trained after war was declared. Naval administration did not wait until hostilities began to increase its force. Recruiting was pressed in the closing months of 1916, immediately after Congress authorized a substantial increase, and 8,000 men were enlisted. In January 1917, enlistments went up to 3,512, and there was a larger increase the next month. In March, when the President signed the order raising the Navy to emergency strength—87,000 regulars, plus 10,000 apprentice seamen, and hospital attendants and others, a total of 97,000—we began a vigorous campaign that covered the entire country. When war was declared there were in the Navy 64,680 enlisted men and 4,376 officers, commissioned and warrant. Some 12,000 reserves had been enrolled, the 10,000 Naval Militia were mustered into service and 590 officers and 3,478 men of the Coast Guard were placed under the Navy. This gave us a total force of approximately 95,000.

Within little more than a month after war was declared

there were 100,000 regulars, and by June 1st the total force had grown to 170,000. By January 1, 1918, there were 300,000 officers and men on the rolls, including reserves and the Coast Guard. By August we had passed the half-million mark, and when the armistice was signed there was a naval personnel of approximately 533,000. The actual figures of the Bureau of Navigation for November 11, 1918, were 531,198, and for December 1, 532,931. But practically all those shown in the latter report had been enlisted before hostilities had ended. Figures of various branches varied slightly before and after the armistice, but there were in the naval service at its maximum:

	Officers	Men
Regulars	10,590	218,251
Reserves	21,618	278,659
Coast Guard	688	6,101
Total	32,896	503,011

It is interesting to compare the above enlistment for the World War with those who served in the Navy in previous wars:

War of 1812	20,000
Mexican War	7,500
Civil War	121,000
Spanish-American	23,000

The Navy was called upon to perform many new tasks—to man troopships and cargo transports, to furnish guards for merchant ships, to maintain forces ashore, in Europe as well as this country, and to render other services that no navy had previously contemplated. All this required personnel in large numbers. But no matter what the service or requirement, when the call came the Navy was ready with officers and men, regulars or reserves.

During the entire war "we never had a delay of a vessel on account of not having the officers and men," said the Chief of the Bureau of Navigation. "The personnel were actually ready at seaports to put on vessels before the vessels were ready."

Few of the recruits had any previous sea experience. Most of them were from the interior, many had never seen the ocean.

But the enthusiasm and energy of teachers and pupils would have surprised Dana, who in his "Two Years Before the Mast," said: "There is not so helpless and pitiable an object in the world as a landsman beginning a sailor's life." They knew they were woefully ignorant of the sea, but they had a stimulus Dana's landsmen lacked—the eager desire to fit themselves to fight. That sharpened their capacity so that in a few weeks they learned more than, without such incentive, they could have mastered in a twelve-month.

At training stations naval terms were used for everything. The barracks building was the "ship"; the floor was the "deck"; offenders were tried at the "mast"; requests for leave were to "go ashore," and returning the men "reported aboard." Meals were "chow" and there was slang for every article of food—stews being known as "slumgullion," salt as "sand," coffee as "Java," and bread was called "punk." Recruits soon picked up the lingo of the sea, and found their "sea legs."

Every feature of life at sea was simulated as closely as possible in the stations, and when sent into service, the men felt at home aboard ships. It was no new experience for them to sleep in hammocks. They had slept in them while under training. "Hit the deck, boys," was always the morning order in station as it is on shipboard. Before they had so much as seen a man-of-war or transport, their motto was, "for the good of the ship."

"Do your bit," never found favor in the Navy; we had a better term. As the commanding officer of one station passed a squad at drill, he heard ringing out the words: "Don't just do your bit. The men on this station do their best."

Serious as was the work, recruits, with the spirit of eternal youth, enlivened it by fun, humor and pranks. This was always in evidence. No hardship could dispel it. A story is told of a young Texan, just enlisted and being inspected at Great Lakes. All the recruits were ordered to fall in line and strip for inspection. Sans shoes, sans shirts, sans pants, in fact sans everything in the way of clothing, the boy marched past the doctor. The Texan, with utter lack of the awe which a gold-striped surgeon is supposed to inspire, had secured a paper stencil, used to mark clothing, and using black paint had lettered his bare stomach with the words, "Good morning, doctor."

The grave surgeon saw the joke was on him, and led the hearty laughter at this original greeting. Another recruit from a Western state, hearing of the various detentions and occasional surgical operations supposed to precede acceptance, hung over the place where he supposed his appendix was located this placard: "I have had my appendix removed." He probably thinks to this day that this saved him from an operation.

"I never knew what patriotism meant before I learned it by service in the Navy."

That remark was addressed to me by an upstanding, clear-headed youth in naval uniform as the mine-sweepers were welcomed back to New York after they had finished the worst job assigned to the navy, that of sweeping up the mines in the drab days after the armistice.

He was bronzed by the wind and the sun of the North Sea. His muscles seemed made of steel. Exposure had given a vigor of body that made you feel that he could do anything.

"Tomorrow," he went on, "I am going back to my job in civil life, but I am a different man. Before the war I think I loved my country and I suppose the flag meant something to me. But I felt no passion of patriotism. It was a matter of course. But the Navy has taught me such reverence for the flag that I have a thrill every time it is raised, and somehow my country became something more than land and water and houses. It seems something holy to me. And that's what my naval service did for me," he added as he passed to his place at the banquet table.

Such inculcation of love of country was the best by-product of the war.

How was it that the regulars in the Navy were able to train so rapidly the recruits that poured in after war was declared? How did they attain the efficiency which led to the promotion of ten thousand of them to warrant or commissioned officers?

The answer is that the Navy had been organized as an educational and industrial, as well as a fighting, institution. Officers and men had gone to school, they were subjected to frequent examinations, and promotions were given from ascertained fitness rather than from the outgrown policy of seniority. Post-graduate schools enabled officers to qualify as experts. Voca-

tional and grammar schools for enlisted men had kindled ambition and given mental as well as physical and naval training. The war, therefore, found the Navy not only fit to fight, but its officers and men equipped to train quickly the half-million young men who enlisted in 1917-18. The Navy had years before instituted educational preparedness—professional, vocational, elementary—as a part of its policy. And the test of war proved that no other form of preparedness produced better results.

In 1913 I issued orders which established a school on every ship in the Navy, the officers instructing the men in reading, spelling, writing and arithmetic, geography, grammar and history, as well as in naval and technical subjects. Nearly every enlisted man who availed himself fully of this instruction afloat received promotion, and all of them became more proficient.

The war proved that vessels manned by seamen having trained minds as well as trained hands are superior to ships with uneducated crews. Neither speed nor armor wins battles. It is intellect, education, training, discipline, team-work, courage.

As a logical result of the schools afloat, Congress later authorized the appointment of one hundred enlisted men annually as midshipmen at the Naval Academy. In the first class after this law made it possible, the honor graduate at Annapolis came from the enlisted personnel. Others have since attained high standing in their class and in the service. The day will come when all appointments to the Naval Academy will be made from the ranks.

The educational system, adopted in the Navy in 1913, became part of the army system of training before the American Expeditionary Force returned from France, and Secretary Baker made such instruction an integral part of the training for men enlisting in the Army.

With the advent of war the educational work of the Navy was greatly enlarged and changed to meet war conditions. In addition to many technical schools the fleet at Yorktown was utilized for intensive training, and prepared over 45,000 officers and men for important and varied duties afloat. The older type of battleships became virtual training schools, devoting particular attention to gunnery, navigation and engineering, quali-

fying men for various duties requiring experience. When ordered to sea the men who had enjoyed this special training gave full proof of the practical schooling through which they had passed.

It required war to bring appreciation of the school as a necessary part of military instruction. The Navy had started schools for sailors in 1914, but it was not until 1919 that the Army and Marine Corps felt the necessity of such schools, which they then established, though in 1913 General Butler, in command of the Marines at Panama, was teaching them Spanish. "It opened my eyes to what might be done," said Judge Garrison, then Secretary of War, upon his return from an inspection trip, "and I am going to advise Army officers to go down to Panama and learn from General Butler how to teach men in the Army." Upon their return from France General Lejeune and General Butler established schools for the teaching of Marines at Quantico, a plan which is being extended to all Marine bases and attracting a superior type of recruits.

In 1866 General Lew Wallace outlined a plan of education for soldiers, approved by Charles Sumner, declaring that the "military system as respects the rank and file is founded on egregious errors." The chief error was that no system of giving the rank and file the same character of instruction as imparted at West Point was at that time offered in order that they might win commissions. He urged that the hours of service of a private soldier be "so divided as to give him time for study and meditation without interference with his routine of duty." The "proverbial idleness of military life" which then prevailed was due to lack of schools and proper instruction. By the addition of the education and promotion policy suggested, General Wallace said, we would "not only get better military service, but as an act of wisest statesmanship you offer in a constitutional way the coveted opportunity for education to every youth in the land."

The Navy, having given trial to the policy, found that all that General Wallace claimed for it was true, and now that the Army and Marine Corps have established like schools, educational advantages as a part of military duty have become the accepted American policy.

The war emphasized the worth of education for military efficiency. While excellent officers were obtained from every source possible, the main dependence for all-around naval officers was upon the Naval Academy graduates. In the test of war they more than justified what was expected of them. In order to secure more officers with Annapolis training, the course for midshipmen was reduced, during the war, to three years and made more intensive, upon the recommendation of Rear Admiral Edward W. Eberle, the able and resourceful superintendent of the Naval Academy. He and his associates, anxious to get into the active fighting, were doing more by the instruction of the increasing number of midshipmen and the zeal with which they inspired all who came under their influence.

Before the war, plans had been adopted and appropriations made for greatly increasing the Naval Academy. A new Seamanship and Navigation Building that cost $1,000,000 was constructed. Four million dollars was expended in enlarging Bancroft Hall, which was more than doubled to accommodate the increased number of midshipmen. In 1912 there were 768 midshipmen at Annapolis. Legislation adopted before the war increased the number to 2,120 in 1917. The enlarged facilities will accommodate 2,400.

Two special courses were established at the Naval Academy in the spring of 1917, one for line officers and the other for men of the supply corps. A total of 1,622 were graduated as ensigns for line duty and 400 as supply officers. They went right into the fleet, and though they had received only a few months' drill, they carried the Annapolis spirit into the service —a spirit of valor and invincibility. The institution at Annapolis, the pride of America and the admiration of all visitors to our country, is easily the greatest naval school in the world.

CHAPTER XXX

THREE HUNDRED THOUSAND STRONG

VAST OPERATIONS COULD HARDLY HAVE BEEN CARRIED ON WITHOUT NAVAL RESERVES AND NATIONAL NAVAL VOLUNTEERS—MANNED HUNDREDS OF VESSELS PLYING TO FRANCE—SERVED ON TRANSPORTS, DESTROYERS, SUB-CHASERS AND EVERY KIND OF CRAFT—NAVAL AVIATION COMPOSED MAINLY OF RESERVISTS—THIRTY THOUSAND MADE OFFICERS.

"WE ARE coming, Uncle Samuel, three hundred thousand strong!" That was the spirit if not the song of the reservists who besieged the recruiting stations and flocked into the Navy at the call of war.

They came from every walk of life—mechanics and millionaires, farm boys and college students, clerks and merchants, yacht owners and boatmen, fishermen and firemen. There was hardly a trade, profession or calling that was not represented. Ninety-nine out of every hundred were landsmen, knowing nothing of the sea. But they took to the naval service like ducks to water, and the rapidity with which they learned, and the efficiency with which they served, amazed the old sea-dogs.

Never again will men dare to ridicule the volunteer, the reservist, the man who in a national crisis lays aside civilian duty to become a soldier or sailor, to shoulder a gun or take his place in the turret. The splendid body of young men from civil life who quickly adapted themselves to military service astonished the old timers, who believed that long service was absolutely necessary to make one efficient.

On every ship in the Navy were found young men who, without previous training, had enrolled for the war, and in a short time were performing well the duties of naval service. Moved by a zeal and patriotism which quickened their ability to learn, the ambitious young men who responded to the call in 1917-18

mastered military knowledge so rapidly as to astonish naval officers, as well as the country. The most capable were placed in command of small naval craft, and the commendation of older officers was hearty and enthusiastic.

Before 1917, responsible naval officials knew that the chief need when war came would be trained leaders. There was never any doubt that patriotic young men would enroll by the thousands and tens of thousands. But you cannot make a naval officer in a day. It is easier to secure good officers on land than on sea. It was leadership, a quality indefinable, that the Navy needed.

There was need for many more officers. After promoting many capable regulars, we turned for officer material to the apt and alert young men in colleges and schools, in shops, in professions and on the farms. Most of them were given their intensive training on board ship, but the Navy was able to give 1,700 a special course at the Naval Academy. Securing that assignment by competition with all other reservists, they came with the imprimatur of approval from ships or shore stations. After the thorough course at Annapolis they went immediately to service afloat, and from admirals and captains I received reports that gave proof of their efficiency. Some did so well that they were keen competitors, in the special duties they performed, with those who had enjoyed a full four-year course at the Naval Academy.

Over 30,000 reservists were made commissioned or warrant officers, nearly three times as many as the total, 10,590, in the regular Navy. They served on vessels of every type, from submarine chasers to battleships. On the transports the larger percentage of the officers were reservists. The usual plan was to have the duties of the captain, executive officer, chief engineer, gunnery officers, senior supply and medical officers performed by regulars, the others being of the reserve force. Out of a total of, say, thirty officers on board a transport, twenty-four of them would be reservists. They were on duty on deck, in the engine room, in the sick quarters, in the supply office, and in practically every part of the ship.

The idea of some who thought in the early days of 1917 that family or political influence would get them a commission

was the subject of not a little good natured ridicule in the service, which found expression in verses like these:

I never thought I'd be a gob—
You see, dad owns a bank—
I thought at least I'd get a job
Above a captain's rank.

But woe to me, alack, alas!
They've put me in white duds;
They don't quite comprehend my class—
They've got me peeling spuds.

It was not easy work, this learning to be a seaman and studying to be an officer. But it made men of those youngsters. The fact that promotion depended on their own efforts, that there was a fair field and no favor, inspired them to effort as nothing else could have done.

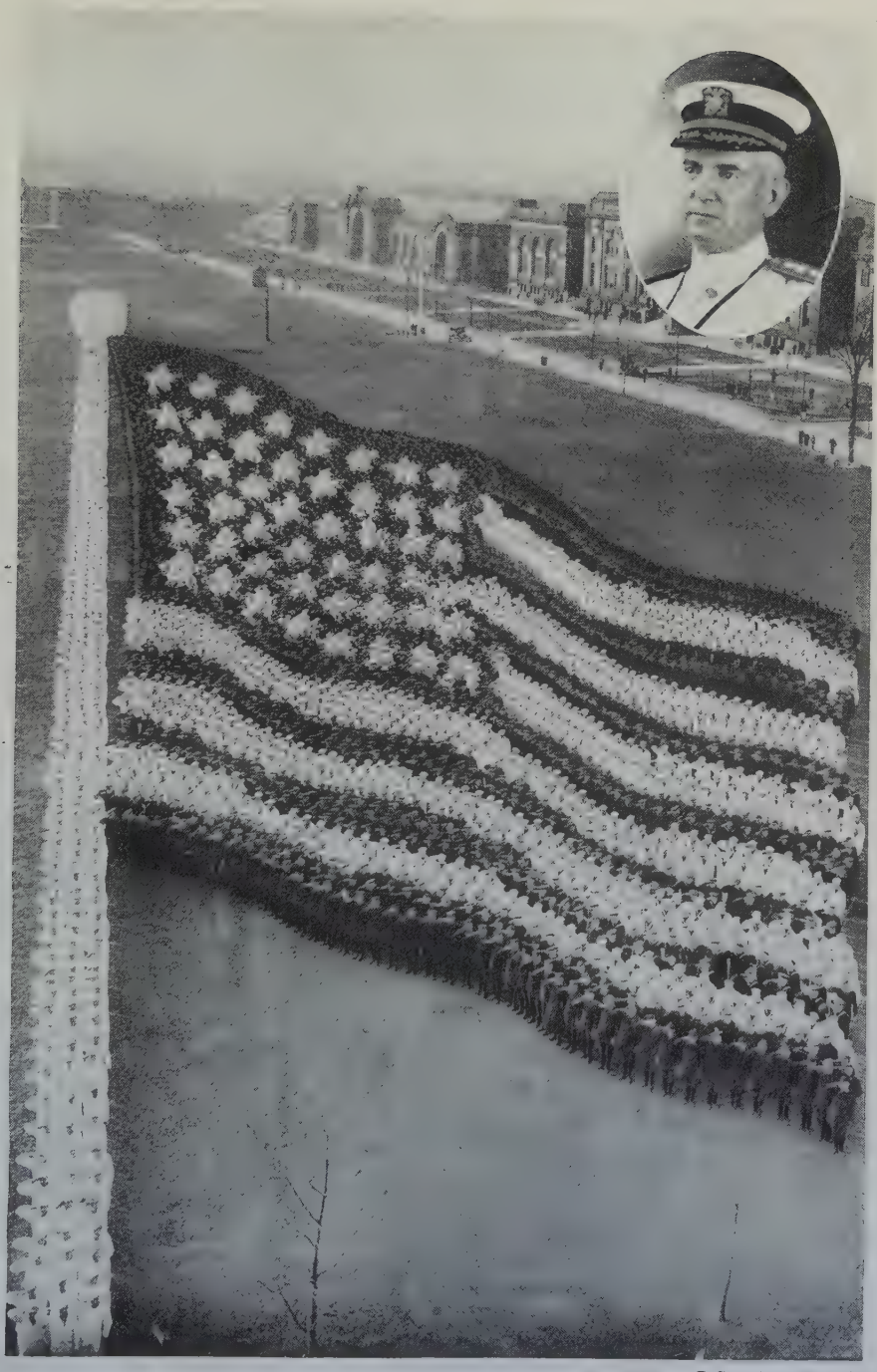
Men of all trades and professions were in the reserve. Millionaires from New York and graduates of Princeton served alongside young fellows who a year before had been plowing behind Missouri mules. An heir of one of the country's largest fortunes was a seaman gunner, and his mate in the same crew was a strapping youngster who had been working in a factory.

An officer who went out for a run on a sub-chaser from Brest thought there was something familiar about the grimy seaman who was testing the forward gun. As the man turned the officer recognized him.

"Well, of all things!" exclaimed the officer. "You're the last man in the world I'd ever expect to find here. The last time I saw you, you were the ladies' favorite, engaged in photographing every debutante and stage celebrity in New York. How did you get into the Navy?"

"Well, it is funny, even to myself," he laughed, and told his story.

He had made a picture of a well-known actress and her baby, and was on his way back to the studio when he struck a recruiting party holding a meeting in the street. Aroused by the enthusiasm, he felt he ought to do his part. He enlisted on the spot, turned over his studio to others, and in a month was shooting a gun on a sub-chaser instead of a camera. He stayed on



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THE LIVING FLAG

Ten thousand blue-jackets, at Great Lakes, the largest naval training station in the world. Inset: Captain William A. Moffett, Commandant.

PANORAMA OF THE UNITED STATES NAVAL ACADEMY AT ANNAPOLIS

Inset: Rear Admiral Edward W. Eberle, Superintendent, who guided the destinies of the Naval Academy during the trying days of the War.

that boat until the last horn blew, and the boys were ordered home. One of his mates at the gun was a former actor, another a clerk in a store.

One day in New York four young fellows suddenly walked out of a motion-picture studio and enlisted. Two of them were high salaried photographers, but they said nothing about that and went in as seamen. Several months afterwards a call was sent out for a few men experienced in photo work. One of these four was found shoveling coal at Pelham. He had been for three years the photographer for Sidney Drew, but he was plugging along at coal passing, and doing a good job until found fitted for other work.

"Captain, I'd like to get a transfer," was the request a young reservist made of his commanding officer in 1918. The captain was surprised. The youngster had rendered service in the armed guards and was doing well on a cargo transport.

"What is the trouble with your present duty?" the Captain asked.

"Well, sir," he answered, "I've been going across on merchantmen. I have been torpedoed three times, but I'd like to get on a destroyer or a submarine-chaser, where I can see a little real action."

That was the spirit of the reservists. Willing to perform any duty, they wanted to get into action, to be sent where the fighting was.

Naval aviation was made up largely of reservists, and the Naval Reserve Flying Corps grew during the war into a force of more than 26,000, with 1,500 qualified pilots and 4,000 student officers in training. Not only were hundreds of bright young men enrolled as prospective aviators, but thousands of skilled mechanics were enlisted in the ground personnel.

Looking over the list of officers of the Cruiser and Transport Force, I find that eight reservists were on Admiral Gleaves' staff, eighteen on that of Admiral Jones. Of the 166 officers who served on the *Leviathan,* the largest of all transports, 93 were reservists. On the *George Washington* there were 63 out of the total of one hundred. Thirty-five served on the *President Lincoln,* 46 on the *President Grant,* 69 on the *Mount Vernon,* 51 on the *Great Northern,* 43 on the *Orizaba,* 28 on the *Pastores,* 33 on

the *Pocahontas,* 24 on the *Powhatan,* 30 on the *Princess Matoika.* Of this large force, there was not a transport or cruiser which did not have a large proportion of reservists in its officers and crew. In carrying the American Army to France and bringing it home, the reservists did their full share of the work.

They played an even larger part in the Naval Overseas Transportation Service. Five thousand officers and thirty thousand men were required to man this vast fleet of cargo ships carrying munitions and supplies to France. Of the officers all but twelve were reservists, as were a large majority of the enlisted men. Thousands more were in training to furnish crews for the hundreds of vessels being built by the Shipping Board which the Navy was preparing to man.

Of our 350 submarine chasers, which were on patrol duty in French and English waters, in the Adriatic and all along the American coast, the large majority were manned by reservists, who performed this hard and often monotonous duty with a cheerfulness that was unfailing. These sturdy little 110-foot boats stayed at sea in all kinds of weather, and braved storms that even the largest vessels did not relish.

The record shows that the reservists could have done anything required at any time anywhere. At the aviation assembly and repair base at Pauillac, France, during an inspection by members of the Naval Affairs Committee, one of the party, Congressman Peters, of Maine, remarked:

"My watch is broken and I have tried both in Paris and at Bordeaux to get it repaired, but was told that it would take two weeks to do so."

Lieutenant Commander Briscoe, in command of the repair base, told the Congressman that it could be fixed right there at the station.

"But," said Mr. Peters, "I have only an hour to spend here."

"All right," said Briscoe, "we can do it."

An instrument repair man was sent for. He took the watch, and fifteen minutes later handed it back to the astonished Congressman, who found it running and set at the correct hour.

"Well, well, I didn't think that you had such skilled mechanics in the service."

"That's nothing," said Briscoe. "We can build a locomotive here—and run it, too."

It was a fact. The mechanical personnel of the Flying Corps was competent to manufacture, overhaul, repair and operate almost any mechanical device made in America.

The United States had no naval-reserve legislation until Congress authorized the creation of a reserve in 1915. It did have the nucleus of a naval militia prior to the act of February 16, 1914, when Congress coördinated these distinct and scattered branches into a cohesive real naval militia organization, subject in time of war to the call of the President. In pursuance of that act a division of Naval Militia was organized in the department, and a board named by the Secretary of the Navy to formulate standards of professional examinations for officers and enlisted men, and also to strengthen the militia as an effective arm of naval power. That board, which pioneered the organization so well that it met the test of war with credit, was composed of Captains W. A. Gill, Edward Capehart, and Harold Norton, and Commanders J. J. Poyer and F. B. Bassett, of the Navy, and Commodore R. P. Forshew, Captain C. D. Bradham, Captain E. A. Evers, Commander J. M. Mitcheson, and Lieutenant J. T. McMillan, of the Naval Militia.

Cruises covering several weeks in the summer were organized for training and were continued until 1917, when these short cruises merged into war service. In encouraging and training these reserves we were carrying out the wise counsel of Jefferson given in 1807: "I think it will be necessary to erect our seafaring men into a naval militia and subject them to tours of duty in whatever port they may be." The act of August 29, 1916, provided that the militia in Federal service be designated as "National Naval Volunteers." The force grew to twelve thousand by 1917, and when war was declared this body of men, who had enjoyed practical training, were at once available for duty. They were given important assignments, ashore and afloat, in the fighting zone on ships of all types, in administrative positions; and, as leaders and instructors of newly enlisted reserves they rendered timely and useful service. During the war the National Naval Volunteers and Reserves were amalgamated along lines largely worked out by naval militia officers.

But for the naval reserve legislation of 1916, I do not see how we could have promptly provided naval personnel for the war. It will always be a monument to the wisdom of the then Chief of the Bureau of Navigation, Admiral Victor Blue, who was again called to that post after serving as captain of the *Texas* under Rodman in the North Sea Fleet, that the legislation was made ready and prepared against the day which we hoped would never come, but which did come, with all suddenness, upon us.

It was the act of August 29, 1916, that created a Naval Reserve Force of six classes—the Fleet Naval Reserve, of former officers, and enlisted men who had completed as much as sixteen years' service in the Navy; the Naval Reserve of men of seagoing experience; the Naval Auxiliary Reserve, men employed on merchant vessels suitable for naval auxiliaries; the Naval Coast Defense Reserve, in which civilians without previous sea experience could be enrolled; the Volunteer Naval Reserve, whose members obligated themselves to serve in the Navy in any of the various classes without retainer pay or uniform gratuity in time of peace; and the Naval Reserve Flying Corps, composed of officers and student flyers and enlisted men qualified for aviation duties. At the same time a Marine Corps Reserve of five classes was authorized, corresponding to the Naval Reserve Force.

This was the basis upon which was built up the vast reserve force of more than 300,000 which was enrolled, trained and put into service during the war. Beginning with a few hundred the force grew rapidly after the break with Germany. Upon the declaration of war the Naval Militia were mustered in, and from 977 officers and 12,407 enlisted militiamen and reserves in service April 6, 1917, the reserves grew in six months to 77,000, in a year to 123,000, and eventually reached a total of 355,447—30,358 officers and 305,089 men.

Except for a few thousand ex-service men and merchant seamen, this immense force was made up of men who had had no seagoing experience, men who had to learn the game from the beginning. And the rapidity with which they were turned from landsmen into sailors reflected great credit on instructors and apprentices.

There is no page of the war more illustrative of what the colleges did, in addition to the college spirit of lofty patriotism which sent educated youths into the service by the thousands,

"Who took the khaki and the gun
Instead of cap and gown,"

than preparing students for all branches of the service. The college campus became a national training ground. Institutions of learning were converted into naval schools where young men were given instruction in branches fitting for service in the Navy. Harvard became a radio school; Massachusetts "Tech" taught aviators, Princeton specialized in cost accounting, Yale's units were commanded by a retired admiral, Stevens Institute had its engineering school. Scores of other colleges and universities in all parts of the country extended their facilities in whatever way was most needed. There was not a rating in the Navy, from the new duty in connection with listening devices to the oldest calling of cook, without special schools. Intensive courses sent men afloat with the best instruction possible in the brief period allotted.

College men did everything from peeling spuds to commanding ships. Trained minds, plus work and courage in the test of war, forever answered in the affirmative the question whether college education is worth what it costs. The college man mastered navigation more rapidly because he had mastered mathematics. His ability to learn readily paid his country a large dividend upon its investment in educational institutions.

Though colleges and universities were giving instruction and nearly all our ships and stations engaged in training reserves as well as regulars, the typical reserve camp was at Pelham Bay. We needed a training station near New York. We had to have a good waterside location with plenty of space, well drained and wholesome, and we found it in the park at Pelham, which the municipal authorities generously tendered for temporary use. Ten miles from the heart of the city, with water on two sides, Pelham Bay was an ideal location, and there we built a station capable of providing for 25,000 men. It was efficiently commanded by Captain W. B. Franklin, a former officer in the regular Navy, and a fine type of the reservist of mature years.

I made it a habit during the war, whenever my duties called me to New York, to run over to Pelham. Being myself in the reserve class, called from civilian life to service with the naval forces for a period, the chance to touch elbow to elbow with these men was always embraced, and after every visit I returned to Washington with new inspiration and new zeal. Many young reservists trained there won promotion—I say won, because commissions were not handed out. They were awarded by demonstration of fitness. The course was so thorough that the reserves called Pelham the "Reserve Naval Academy."

Eighteen reservists were commended for acts of personal bravery, 110 for courageous and heroic action. Four Medals of Honor were awarded reservists; eleven received Distinguished Service Medals; the Navy Cross was awarded to 265 officers and 50 enlisted men, and special letters of commendation for exceptional performance of duty were sent to 171 officers and 20 men of the Naval Reserve Force.

This is the record that glorified all the reservists, not alone those marked for special distinction but the thousands who were of the same stuff and spirit. They fought well. They died well. They have left in deeds and words a record that will be an inspiration to unborn generations. As illustrating their spirit I recall a legacy left by a valorous young aviator for whom I named a destroyer.

Kenneth MacLeish, of Glencoe, Ill., was enrolled in the Reserve Flying Corps in March, 1917. In October he went to France and became a member of the bombing group, taking part in many air raids over the enemy's lines. While on a raid his squadron was attacked by a dozen enemy airplanes. Fighting desperately, to enable his fellows to escape, MacLeish's plane was shot down and he was killed. His daring, his fortitude, his Christian spirit were a trinity which make him immortal. Writing to his parents, just before he was killed, MacLeish penned this classic that will live in the annals of the Naval Reserves:

In the first place, if I find it necessary to make the supreme sacrifice, always remember this; I am firmly convinced that the ideals which I am going to fight for are right, and splendid ideals, that I am happy to be able to give so much for them. I could not have any self-respect, I could not consider myself a man, if I saw these ideals defeated when

it lies in my power to defend them. * * * So you see, I have no fears, I have no regrets. I have only to thank God for such a wonderful opportunity to serve Him and the world. * * * And the life that I lay down will be my preparation for the grander, finer life that I take up.

I shall live! * * * you must not grieve; I shall be supremely happy * * * so must you—not that I have "gone west," but that I have bought such a wonderful life at such a small price, and paid for it so gladly.

CHAPTER XXXI

WOMEN IN THE NAVY

MORE THAN ELEVEN THOUSAND REGULARLY ENLISTED—THEY CONSTITUTE THE ONLY WOMEN ENTITLED TO MEMBERSHIP IN THE AMERICAN LEGION—NO LACK OF WOMAN'S NURSING—GIRLS WORKED IN TORPEDO FACTORY AND MUNITION PLANTS—THE INSPIRING LEADERSHIP OF MRS. ANNA HOWARD SHAW, HEAD OF WOMAN'S COUNCIL OF NATIONAL DEFENSE.

THE Navy was long regarded as an institution for men only. It was the only place where there was no opening for women. To be sure no sailor would have felt comfortable going to sea in a ship which had not been sponsored by a woman's breaking the bottle as it slid into the waters at the launching. A ship, feminine in all our language, demanded a woman's benediction as the assurance of favoring winds and prosperous voyages. But men alone wore the naval uniform prior to 1917.

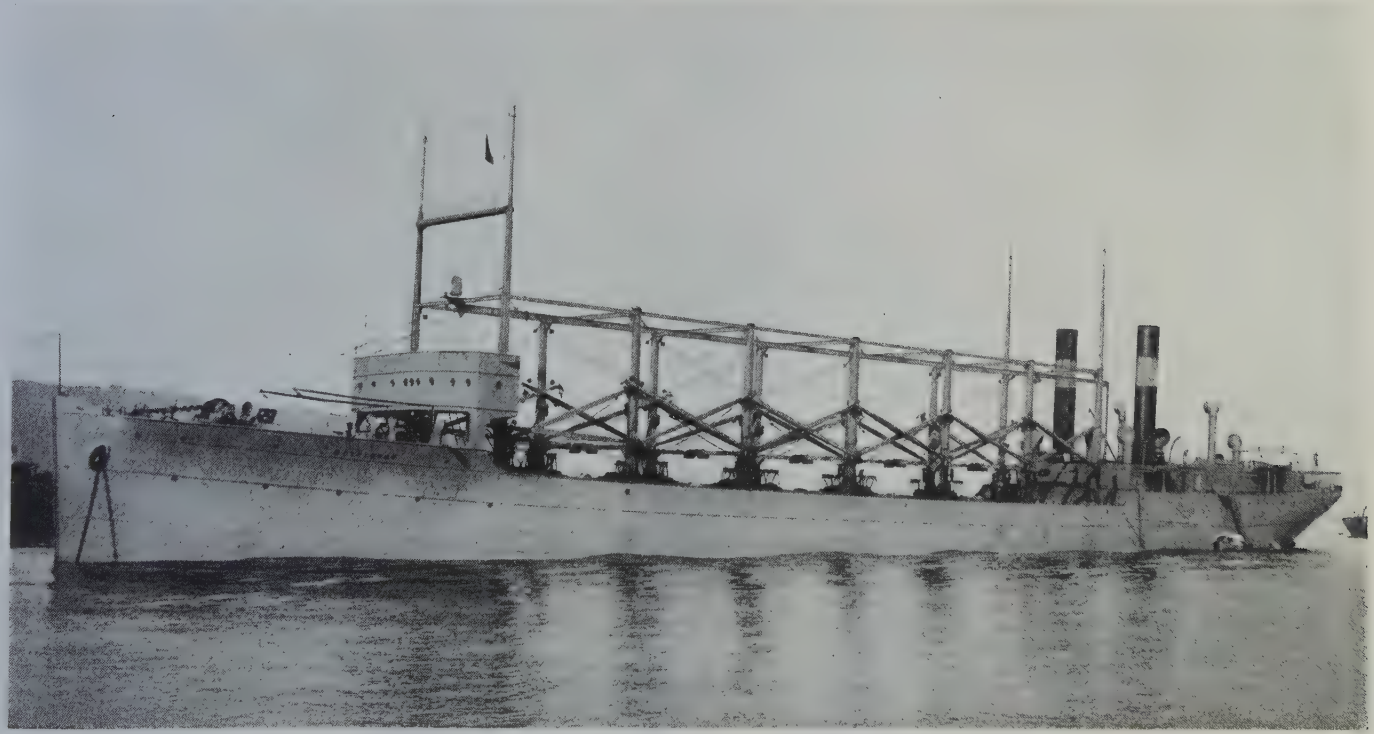
It is true that before that time it had been found that the naval establishment could not get along without women, and they had been admitted to hospitals and dispensaries ashore, where they were found indispensable.

In March, 1917, after the break with Germany, the Navy stood in great need of clerical assistants in Washington and at all the shore stations. There was no appropriation to pay civilians for the work that was immediately necessary. Every bureau and naval establishment appealed for clerks and stenographers. How could they be secured at once? The Civil Service Commission could not furnish a tithe of the number required, even if there had been the money to pay them.

"Is there any law that says a yeoman must be a man?" I asked my legal advisers. The answer was that there was not, but that only men had heretofore been enlisted. The law did not say "male."

YEOMEN (F) IN LIBERTY LOAN PARADE, NEW YORK CITY

The Yeomen (F) were regular yeomen, and they did yeomen service. Inset: Dr. Anna Howard Shaw, chairman of the Woman's Council, Council of National Defense, under whose direction the women of the United States were mobilized for war work.



U. S. S. CYCLOPS, THE COLLIER WHICH DISAPPEARED WITHOUT LEAVING A TRACE

"Then enroll women in the Naval Reserve as yeomen," I said, "and we will have the best clerical assistance the country can provide."

It was done, and they were given the designation Yeomen (F)—not "Yeomanettes," but regular yeomen, the F indicating female. They were truly yeomen and did yeoman service. In the Marine Corps they were equally efficient, and were known as "Marinettes" or Lady Marines.

"I do not wish to enroll as a Naval Reservist," said an independent young woman to the enrolling officer at the Washington Navy Yard, "until I know what ship I am to serve on."

It was explained to her that women yeomen were not to go to sea.

"But I want to go on the *Nevada,*" she said, in tones of disappointment.

These women yeomen, enlisting as reservists, served as translators, stenographers, clerks, typists, on recruiting duty, and with hospital units in France. Too much could not be said of their efficiency, loyalty and patriotism.

Eleven thousand Yeomen (F), 1,713 nurses, and 269 Marinettes were enrolled. They were, I am informed, the only women serving during the war who were on the same footing as men with all allowances and pay and clothing outfits, and the only women eligible to membership in the American Legion. Those who made up the four companies in Washington became proficient in military drill. They made a handsome appearance when, upon the return of the Rainbow Division, they were the guard of honor to the President, having previously taken part, with other military units, in the welcome to President Wilson when he returned from Paris. They made a notable showing as they formed in double lines of spotless white uniforms as the presidential party passed through the Union Station at Washington to receive the enthusiastic welcome given by the multitudes.

The uniforms of the Yeomen (F) and the Marines (F) were natty and beautiful, were worn with pride, and are preserved by them as the honorable token of service during the great war. They were both becoming and suited to the duty assigned. As a designer of woman's uniforms the Navy Department scored

a distinct success, for these uniforms were copied by women all over the country.

The last drill of these Yeomen (F) was held on July 31, 1919, upon their demobilization. They had saved the day in war, and the Navy regretted the legislation which compelled the disbanding. I do not know how the great increase of work could have been carried on without them. I voiced the thanks of the Navy in expressing "gratitude and appreciation of their splendid service and patriotic coöperation," as they were mustered out. They are organized in posts in the American Legion, and have carried into civil life the spirit of devotion to country which they displayed in the days of the war.

I issued an order early in the war that women be given preference in appointments to clerical positions in the Navy. This released men for military duty. The war taught that the Navy was dependent upon woman's deftness not only to prevent "lack of woman's nursing," but also in multifarious duties, including assembling parts for torpedoes and other war munitions. Upon a visit to the Newport Torpedo Station, I found women in overalls at work, putting together parts of torpedoes made there. They were so capable and showed such skill that scores were enabled to do, and to do excellently, a character of work formerly done exclusively by men. Not a few of them were school teachers, who, feeling the compulsion for war-work, shared the feeling of the wealthy woman in Washington, who, applying for a position in the gun factory at Washington, said:

"I can knit at night. If I cannot fight, I wish something to do where I can feel I am really in the war, helping to make guns or torpedoes or other real instruments of war—a job that is hard, and where labor in the heat and burden of the day taxes all my strength."

She was a sister in spirit of the many women who worked in munition plants, fashioning rifles, dressed in overalls, faces begrimed, proud that they were thus helping on with the war. If there had been need, many more would have gone into the shops, glad to tax their strength for the cause in which their very souls were enlisted.

Not only does the world owe a lasting debt of gratitude to women who served, in shops, in the Navy Department, in fac-

tories making naval aircraft, at navy bases, in work for the Army, but likewise the larger number, who in their homes and communities and in welfare work at home and abroad, dedicated their hands and spirit to the varied war activities. Their most notable organized duties were in the Red Cross and the Young Women's Christian Association. A story of the benefactions of the Red Cross is chiefly the story of woman's work and woman's ministrations. With the mothers of our fighting forces, they constituted in truth the irresistible first line of defense and offense which would have held to the last against all odds. They furnished the basis of what, for lack of a better name, we called morale—the will to win—without which ships and guns and fighting machinery never yet won a battle. A Woman's Advisory Committee on Naval Auxiliaries to the Red Cross War Council rendered patriotic and useful service.

The Government early found the necessity for the organization and direction of women in war work, and the Council of National Defense set up a Woman's Council, headed by that great woman of statesmanship and vision, the late Dr. Anna Howard Shaw. The women who composed this Council, in addition to Dr. Shaw, were Mrs. Philip N. Moore, Mrs. Josiah E. Cowles, Miss Maude Wetmore, Mrs. Carrie Chapman Catt, Mrs. Antoinette Funk, Mrs. Stanley McCormick, Mrs. Joseph R. Lamar, Miss Ida M. Tarbell, Miss Agnes Nestor, Mrs. Ira Couch Wood, secretary. Under the direction of this Woman's Council the women of America were mobilized for war work in all parts of America. Women were found, wholly enlisted, with their counsel and labors and sacrifice, wherever men planned or fought or died. Some gave their lives, many gave their health, all gave complete consecration.

CHAPTER XXXII

COAST GUARD WON DISTINCTION

ESCORTING CONVOYS BETWEEN GIBRALTAR AND ENGLAND, CUTTERS MADE NOTABLE RECORD—"TAMPA" SUNK, WITH ALL HER GALLANT OFFICERS AND MEN—"SENECA" SAVED SURVIVORS OF "COWSLIP" AND "QUEEN"—COAST AND GEODETIC SURVEY AND LIGHTHOUSE SERVICE DID FINE WORK.

THE Coast Guard automatically came under control of the Navy when war was declared. Its vessels, its trained officers and men proved a valuable addition to our forces, and rendered notable service in various areas and in many lines of activity, at home and abroad.

They formed a very important part of our forces at Gibraltar, which included six Coast Guard cutters, the *Seneca, Yamacraw, Algonquin, Ossipee, Manning* and *Tampa,* constantly engaged in escorting convoys.

The splendid service they performed was commended in Admiral Niblack's letter of September 5, 1918, to Captain Charles Satterlee, commanding officer of the *Tampa,* in which, after detailing her record, under way more than 3,500 miles each month since October 1, 1917, "never disabled, ready whenever called on," he said:

> This excellent record is an evidence of a high state of efficiency, an excellent ship spirit, and organization capable of keeping the vessel in service with the minimum of shore assistance. The squadron commander takes great pleasure in congratulating the commanding officer, officers and crew on the record which they have made.

Three weeks after notable service had evoked this commendation, every officer and man of the *Tampa* met sudden and mysterious death. The night of September 26, 1918, the *Tampa,* having escorted a convoy from Gibraltar, was proceeding toward Milford Haven, Wales. At 8:45 p. m., a loud explosion

was heard by vessels of the convoy, but the night was so dark that the *Tampa* disappeared before her companions could see what had happened. American destroyers and British patrol craft searched the vicinity.

Nothing was found except a small amount of wreckage and the bodies of two men in naval uniforms. It is believed that the *Tampa* was torpedoed by a submarine. The German U-53 claimed to have sunk a United States vessel of her description. "Listening-in" stations on shore reported that they detected the presence of a submarine near the spot where the *Tampa* was destroyed. But no one knows how she met her fate. Every soul on board the vessel perished, 115 in all, of whom 111 were Coast Guard personnel. The officers lost were Captain Satterlee, First Lieutenants Archibald H. Scally and John T. Carr, Second Lieutenants Roy A. Bothwell, James M. Earp and John F. McGourty, and Third Lieutenant James A. Frost, Jr.

It must, indeed, be a matter of solemn pride to the Coast Guard to know that the *Tampa,* lost with all her gallant officers and men, was distinguished by such service and sacrifice that it will always be remembered in the naval annals of our country. It was my pleasure to name one of the modern destroyers of the Navy for Captain Satterlee, and on April 16, 1921, a new cruising vessel of the Coast Guard was launched at Oakland, California, named the *Tampa.*

Few instances that occurred during the war are more indicative of devotion to duty than the gallant attempt of the *Seneca* to salvage the steamer *Wellington,* torpedoed September 16, 1918. Though damaged, its officers thought that the vessel would probably float, but the crew refused to remain on board.

Lieutenant F. W. Brown (U. S. Coast Guard), the *Seneca's* navigating officer, asked permission to take a volunteer crew and endeavor to work the *Wellington* into port. Nearly all the *Seneca's* complement volunteered for this duty. Lieutenant Brown made a hasty selection from the many volunteers, taking Acting Machinist William L. Boyce and eighteen men. En route to the torpedoed vessel, lookouts and gun's crew were detailed. Upon boarding the ship, ammunition was broken out, the gun's crew was assigned, and lookouts posted. It was highly probable that the submarine would make another attack. Soon a

second boat, containing the master, first and second officers and eleven of the *Wellington's* crew came on board. The *Seneca* had to leave at once to protect the remainder of the convoy, and could only send out radio calls for assistance. There followed an heroic and all but successful effort on the part of Lieutenant Brown and his men to save the steamship.

Within half an hour, the *Wellington* was started at slow speed, heading for Brest. Men took turns in passing coal and firing, coming out on deck when relieved and taking a gun-watch. One of the men from the *Seneca* was a cook, Russell Elam, who disappeared into the galley, and in a short time announced that dinner was served for all hands. When he appeared on the bridge with Lieutenant Brown's dinner, he was clad in an immaculate white serving jacket and had omitted no detail of service. And this on a torpedoed steamer in imminent danger of sinking! Cook Elam met a heroic death with others of this gallant party.

During the afternoon all went well, but at sundown the wind increased, seas crashed over the bow, and all on board were in danger. The ship listed sharply, rolling so that the davit heads threatened to force the lifeboat under. Those aboard were ordered to get into the boat, and hold on to the *Wellington* by use of a long rope, a sea painter. Seven of the *Wellington's* crew got into the boat with one *Seneca* man detailed to unhook it, the other Coast Guardsmen standing by to lower it. The radio operator, M. S. Mason, remained at his instruments to keep in touch with the destroyer *Warrington,* which was proceeding to their assistance, and three men kept the pumps going. Just after the boat was lowered, someone cut the painter, and the boat drifted away. The *Seneca's* party and some of the collier's men were left on board with nothing to rely upon except a small raft which they had constructed.

At 11:35 p. m., the *Wellington's* position was sent to the *Warrington* (Lieutenant Commander Van der Veer). To aid the destroyer in her search, rockets were sent up at fifteen-minute intervals, and at 2:30 a. m., answering rockets were seen. The men in the lifeboat were gotten aboard the *Warrington,* but the boat was crushed. Lieutenant Brown found some long, heavy planks; from these three rafts were improvised,

which were lowered and lines let down so the men could reach them in the darkness. The lights of the destroyer were now in sight. The *Wellington* listed rapidly. With a hand flashlight, Lieutenant Brown signaled that he had to abandon ship immediately, and asked the destroyer to work in close and pick up his men. As the collier settled by the head, at the same time turning over, Brown crawled out over the railing and flashed his last appeal, "My men are in the water."

At that moment the boilers exploded, the vessel seemed to rise up, and as she lurched into her final plunge, Brown sprang into the water. This was at 4 a. m., in pitch darkness, a raging gale and tempestuous seas.

After swimming awhile, casting about for something to cling to, and finding nothing, Brown heard a cry for help. Swimming towards the man, he saw that he was clinging to a plank, and told him to hold on and keep his mouth closed, so as not to take in water. Finding two calcium lights burning, he extinguished them so no one should be misled into thinking they marked a raft. As he approached the destroyer, Brown called out repeatedly: "I had eighteen men." His sole thought was that the men committed to his charge should be saved.

Running close to the *Wellington,* the *Warrington* floated down three life-rafts and all available buoys, well lighted. It was still very dark, but from a few hundred yards to leeward the men on the *Warrington* watched the black hull turn turtle, slowly settle in the water, and then disappear. When dawn broke, they began to see men in the water, some on rafts and buoys, some on floating wreckage. Eight men were finally picked up, one of whom died on board. One of the first rescued proved to be Lieutenant Brown. A heaving line was flung to him and he grabbed it, but said he did not remember having been hauled on board. Apparently he lost consciousness, and his identity was not discovered until he awoke.

Three of the *Warrington's* crew had jumped into the heavy sea, with lines made fast to their waists, in attempting to save life. Seaman James C. Osborne, of the Coast Guard, supporting a shipmate, Coxswain Peterson, swam through the heavy seas and placed Peterson, who was only half conscious, on a raft. Several times both were washed off, but each time

Osborne went to his shipmate's assistance and replaced him on the raft. Finally Osborne semaphored, "I am all right, but he is gone unless you come right away." The *Warrington* rescued them both.

Lieutenant Brown and eight men of the *Seneca* were saved, Machinist Boyce and ten Coast Guardsmen were lost, besides five belonging to the *Wellington's* crew. But for the heavy gale and rough sea that developed, Brown and his volunteers would probably have won out and saved ship and cargo. They upheld to the fullest the high traditions of the Navy and Coast Guard.

Another example of readiness to assume responsibility and act as the necessities of the occasion require, is that of Captain William J. Wheeler (U. S. Coast Guard), commanding the *Seneca,* which rescued the survivors from the British patrol sloop, *Cowslip.* After dark on April 2, 1918, the danger zone escort from Gibraltar, including the *Cowslip,* joined the convoy which the *Seneca* had escorted from England. A loud explosion was heard and the *Cowslip* displayed distress signals. The *Seneca* immediately headed for her, although the sloop flashed the signal, "Stay away! Submarine in sight, port quarter." Circling the *Cowslip* in search of the submarine, the *Seneca* and the destroyer *Dale,* which had also come up, began to search for the enemy. The established doctrine then was that, when a vessel was torpedoed, other vessels in the vicinity should not risk their own destruction by endeavoring to go to her relief and that rescue of survivors should be considered as a secondary duty. But American officers could not witness a disabled and sinking ship without making every effort to save her people.

Three times the *Seneca* approached, stopping to lower her own boats and take off survivors from the British sloop. One enlisted man and all the wardroom officers of the *Cowslip,* except the officer-of-the-deck, had been killed by the explosion. The *Seneca* rescued all the survivors, including the commanding officer, another commissioned officer, and 79 enlisted men. For this courageous and meritorious act, Captain Wheeler was commended by Admiral Niblack, Admiral Sims, and the British admiral commanding at Gibraltar.

On June 29, 1918, the *Seneca* was acting as ocean escort to a

LOST WITH EVERY MAN ON BOARD

The Coast Guard Cutter Tampa was lost on the night of September 26, 1918, sunk, probably by a submarine, before any of her companions in the convoy could see what had happened. Inset: Captain Charles Satterlee, commanding the Tampa.

THEY SAVED SURVIVORS OF TORPEDOED VESSELS

At the risk of their own destruction, the crew of the Coast Guard Cutter Seneca repeatedly rescued survivors of torpedoed vessels, although it was an established rule that when a vessel was torpedoed other vessels in the vicinity should not go to her aid because of the almost certain destruction which would await the rescuers. Inset: Captain William J. Wheeler, commanding the Seneca.

GALLANT OFFICERS OF THE COAST GUARD

Left to right: Commodore E. P. Bertholf, commandant of the Coast Guard from 1911 to July, 1919; Lieutenant F. W. Brown, navigating officer of the Seneca, who volunteered to work the torpedoed Wellington to port; Boatswain John A. Midgett, of Coast Guard Station No. 179, who led the rescue of survivors of the torpedoed Mirlo under extraordinary danger from fire.

convoy, when at 6:45 a. m., the British steamer *Queen* was torpedoed and sank in five minutes. As in the case of the *Cowslip,* Captain Wheeler boldly approached the *Queen.* Dropping depth charges and firing his guns to keep the submarine down, he picked up the survivors.

It was work like this, calling for daring and quick decision, that distinguished the vessels of the Coast Guard, which, operating in the Navy, performed such signal service for the Allies and the commerce of the world.

On this side of the Atlantic, the main contribution by the Coast Guard was as part of the patrol service under Admiral Anderson in the Caribbean and the Gulf of Mexico, protecting the oil supply that went in large volume from Texas and Mexico to British and other Allied naval ships and for the necessary uses by the Allied armies in France.

In the great disaster that followed the blowing up of a munition ship at Halifax, the U. S. Coast Guard cutter *Morrill,* in command of Lieutenant H. G. Hemmingway, and its crew gave first aid to the injured in that stricken city. Coast Guard men supervised, without accident or loss of life, the landing of 345,602 tons of high explosives in New York and the loading on 1,698 vessels. The total value of the explosives on these ships was more than five hundred million dollars.

When the tug *Perth Amboy* and four barges were shelled by a German submarine on July 21, 1918, within sight of Coast Guard station No. 40, at East Orleans, Mass., Keeper Robert F. Pierce, with his crew, launched their surfboat, and while the shelling was continuing, proceeded out to assist the tug and her tow and aided in safely landing the crew and treating the wounded.

A very gallant action was that of the keeper and crew of Coast Guard Station No. 179 at Chicamacomico, North Carolina, in rescuing life under extraordinary circumstances following the destruction of the steamship *Mirlo,* on August 16, 1918. At 4:30 p. m. the lookout reported seeing a great mass of water shoot into the air. It seemed to cover the after portion of a steamer that was about seven miles away. At the same time a quantity of smoke rose from the steamer. Fire was seen, and heavy explosions were heard. The Coast Guard boat went to

the rescue. Five miles off shore they met one of the ship's boats with the captain and six men in it, who informed them that the ship was a British tank steamer and that she had been torpedoed. Keeper John A. Midgett directed the captain where to go. The Coast Guard boat was headed for the burning mass of wreckage and oil. On arrival the sea was found to be covered with burning oil and blazing gas for a hundred yards, with two masses of flames about a hundred yards apart. In between these, when the smoke would clear away a little, a life-boat could be seen, bottom up, with six men clinging to it. Heavy seas washed over the boat.

The Coast Guardsmen made their way through that inferno of smoke, thrashing wreckage and blazing oil. They evaded the perils of floating debris, fire, and wave. Lifting the six men on board, all that survived of the sixteen who had been in that lifeboat, the Coast Guard rescuers sought the safety of clear water. Thirty-six men of the *Mirlo* were rescued.

The first United States vessel to pass the German fortifications at Heligoland and through the Kiel Canal after the signing of the armistice was the *Aphrodite,* commanded by a Coast Guard officer, Captain F. C. Billard. While passing through the North Sea, the *Aphrodite* struck a German mine, but escaped destruction and was able to proceed to Germany.

The danger to American shipping by a submarine base on our coast, not to speak of the violation of neutrality which such action would involve, necessitated a patrol of the coast to make sure that there was no such base and to prevent U-boat operations. These requirements were admirably met by the cooperation of the Coast Guard. There were on the Atlantic and Gulf coasts 199 stations.

On April 6, 1917, one message, "Plan One. Acknowledge," incorporated the Coast Guard as an integral part of the Navy during the war. That service had 138 line officers, 70 engineer officers, 13 district superintendents, and 2 constructors, a total of 233 commissioned and 257 warrant officers, and 3,478 men —a valuable addition to the naval forces. The professional ability of the Coast Guard officers is evidenced by the fact that twenty-four commanded combatant ships operating in European waters, five vessels of the patrol force in the Carib-

bean Sea, and twenty-three combatant craft attached to naval districts. Five Coast Guard officers commanded training camps, six performed aviation duty, two being in command of air stations, one of these in France. The Navy Department, naturally enough, assigned to the command of combatant ships only officers whose experience and ability warranted such detail and only those officers in whom the Department had implicit confidence.

Commodore E. P. Bertholf, then commandant, and Commodore W. E. Reynolds, later commandant of the Coast Guard, and other officers were assigned important administrative duties. Ashore and afloat, officers and men discharged their duties with such efficiency that at the close of the war I strongly recommended to the President and Congress that the Coast Guard be continued permanently as a part of the Navy.

Not only was the Coast Guard an integral part of the Navy during the war, but the Lighthouse Service added 1,284 men to the naval personnel and fifty vessels to the naval force. These vessels did a large part of the work on the defensive entrance areas, laid mines, and were employed as patrols. The light vessels and lighthouses served as lookouts and reporting stations. The Diamond Shoal Light vessel, off Cape Hatteras, was sunk by a German submarine, but not until after it had given warning and saved a number of vessels. The larger lighthouse tenders were almost continuously in the danger-zone and were employed to buoy the wrecks of torpedoed vessels.

The transfer of forty-one commissioned officers of the Coast and Geodetic Survey gave the Navy additional officers who, from their previous training and experience, immediately assumed important duties. In addition to commanding patrol boats and auxiliaries and other service afloat, their scientific attainments made them particularly useful. For example, one officer, by his experience in developing the wire-drag method of searching for hidden rocks and dangers, was well fitted for research work on the anti-submarine problem. His services were so valuable that he was ordered to London to coöperate with the British Admiralty in further study of anti-submarine devices. Officers of this service at the Naval Observatory, among other contributions, designed a new type of submarine compass binnacle and

new type of aircraft compass. One of the ships of the Coast and Geodetic Survey, the *Surveyor,* did excellent service at Gibraltar and shared with the *Wheeling* and the *Venita* the credit for a successful attack on a submarine.

CHAPTER XXXIII

WINNING THE FIRST BATTLE OF THE WAR

THE WAR AGAINST DISEASE FOUGHT AND WON BY MEDICAL DEPARTMENT—GENERAL ORDER NO. 99—SAFETY ZONES ESTABLISHED—HOSPITALS OVERSEAS—SKY PILOT LEADERSHIP—COÖPERATION OF VOLUNTEER WELFARE ORGANIZATIONS—NAVAL OFFENDERS HELPED TO FIND THEMSELVES.

THE death rate in the Navy by disease in 1917-18 was the lowest in the history of wars. Sickness, until the influenza epidemic, was less than in peace time. The loss of days by immoral disease decreased below the rate prevailing before the war. Preventive medicine, and war against disease and vice gave a record to the Navy Medical Corps which is a tribute alike to them and to the profession to which they belong.

No branch of the military service was more forehanded and no officer saw more clearly the possible needs that war would entail or made ampler provision for them than the Surgeon General of the Navy, Admiral William C. Braisted, who in recognition of his distinguished service was given the privilege of retirement by a special act of Congress. He was later elected president of the American Medical Association.

"The first battle of the war, that against disease, was won by the Medical Department of the Navy," reported the House Naval Affairs Committee.

When I was pressing for large appropriations for the Medical Department of the Navy, the Chairman of the House Appropriations Committee asked me:

"Mr. Secretary, do you really think there is proof of the absolute need for the whole of the large amount asked for by the Surgeon General?"

"I do not," was my reply.

"Then why are you here urging the appropriation of so large a sum?" he asked.

"For the same reason," I replied, "that will cause you to appropriate it."

He looked at me with some astonishment and I added:

I have not the information that justifies so large an expenditure; nobody has. The Surgeon General, who is a wise and economical administrator, has estimated that under certain contingencies this money will be required. I cannot see into the future. If there are no unforeseen casualties and no epidemics, we will neither need nor spend the money. But if the possible in war happens, and some great disaster or far-reaching epidemic befalls us, what could I say to the fathers and mothers of the Republic if I had disapproved the recommendation of the Surgeon General, and what would they say of you and the Congress if you refused to vote the appropriation? The sum may seem too large to you or to me. It is, if past experience can be depended upon. But in war, in matters of battles and wounds and death and possible epidemics, our duty is to make large provision in the hope that it may not all be needed.

The Chairman, zealous to win the war and to give every aid, led the fight for the large appropriation.

The administration at Washington, charged with the conduct of the war, early realized that health was the foundation of military efficiency, that health was dependent upon clean living, and that protection of men in uniform from drink and disease was the prime duty owed to them, to their parents, and to the world dependent, in the last analysis, upon their fitness to fight. Ignorance, intemperance and indifference were the first foes to be faced in 1917.

The war broke precedents. The first broken was to override the ancient theory that Government has nothing to do with the private life of a fighter and no duty to protect him from immoral surroundings. Our Government recognized that "the single man in khaki ain't no plaster saint." As the youths poured into the training camps, harpies set up their joints hard by. For the first time in history the Government said to them: "Thou shalt not." It drove them and their establishments from the vicinity of stations and camps.

Authority was given by Congress for the Chief Executive to establish zone systems for protection of camps. President

Wilson established zones wherever sailors, soldiers, or marines were undergoing training. Appeals were made to state and local authorities for assistance. Writing early in 1917 to the Governor of Rhode Island, where military efficiency was jeopardized by failure to enforce laws, I said:

> There lies upon us morally, to a degree far outreaching any technical responsibility, the duty of leaving nothing undone to protect these young men from that contamination of their bodies which will not only impair their military efficiency but * * * return them to their homes a source of danger to their families and the community at large.

Seeking his hearty coöperation, I reminded this executive that these dangers were bad enough in ordinary times, but were multiplied manifold in times of war when great bodies of men are necessarily gathered together away from the restraints of home and under the stress of emotions and reaction which tend to dislodge the standards of normal life.

A Commission on Training Camp Activities, headed by Mr. Raymond Fosdick, led in the welfare work, extending from the home to the trenches and turrets. The other members were:

> John J. Eagan, Vice Chairman, Clifford W. Barnes, Lieutenant Richard E. Byrd, U. S. N., Walter Camp, Selah Chamberlain, Lee F. Hanmer, Joseph Lee, Lieutenant Commander Claude B. Mayo, U. S. N., E. T. Meredith, Barton Myers, Charles P. Neill, Mrs. Helen Ring Robinson, Mrs. Finley J. Shepard, Mrs. Daisy McLaurin Stevens, Mrs. Edward T. Stotesbury, John S. Tichenor, Dean C. Mathews, Secretary, Marion M. Jackson, Field Secretary.

The multitude of religious and social agencies, anxious to serve, made it necessary for the Government to give its imprimatur to certain organized forces whose benefactions justified such recognition. I refer to the Red Cross, Young Men's Christian Association, Young Women's Christian Association, Knights of Columbus, Young Hebrew Association, Salvation Army and American Library Association. They coöperated cordially with Army and Navy authorities.

The inspiration and leadership of the religious and welfare work of the Navy came from its corps of chaplains. There had been no addition to the number of the corps for forty years before 1914. The increase gave a "sky pilot" for every great ship and every important station. Additions in the regular and reserve corps when war came enabled the Navy to supply

religious direction by consecrated men of every creed. They went with the Marines into Belleau Wood, with Rodman's fleet in the North Sea, guided the new recruits on sea and shore—faithful, devoted spiritual leaders in days when men unafraid looked death in the face. These soldiers of the cross were comrades in battle, shipmates in storm, and comforters in death.

In 1914 an order was issued known as "General Order 99" prohibiting the introduction of intoxicants as a beverage on any ship or station in the Navy. That temperance order was in these words:

General Order No. 99

Navy Department
Washington, D. C., June 1, 1914.

On July 1, 1914, article 827, Naval Instructions, will be annulled, and in its stead the following will be substituted:

"The use or introduction for drinking purposes of alcoholic liquors on board any naval vessel, or within any navy yard or station, is strictly prohibited, and, commanding officers will be held responsible for the enforcement of this order."

JOSEPHUS DANIELS,
Secretary of the Navy.

This was recommended by the Surgeon General of the Navy. If not universally popular when it was promulgated, when war came it was recognized that it had contributed to the fitness of the naval personnel. The zone system of excluding drink and houses of ill fame from training places, laws prohibiting the sale of liquor to any man in uniform, war-time prohibition, and finally the ratifying of the national prohibition amendment to the Constitution evidenced the progressive steps taken for protection of men in uniform.

With the coming of war, plans made long before were put into effect. Permanent hospitals were enlarged and temporary hospitals built to make ready for the large expansion in personnel. The bed capacity within eight months was increased from 3,850 to 15,689, and before the end of the war to over 19,000. Four hospitals were established in Great Britain. One was at Strathpeffer, Scotland, in easy communication with the Grand Fleet and the bases established by the North Sea mining groups. It was magnificently located and splendidly equipped,

and proved of great service to the British Navy as well as our own. Another at Leith was near one of the North Sea bases, and a third was established at Queenstown, the chief base of our destroyers operating with the British. Early in the war two base hospital units were sent to Brest. Dispensaries and hospitals were established in the Mediterranean at Corfu, in Italy, France, Gibraltar and the Azores. Three hospital ships were in service commanded by medical officers, who, as President Roosevelt wisely said, should always be in command of hospital ships.

When the armistice was signed the Navy was ready to bring back from France 30,000 sick and wounded men per month. Wherever men of the Navy and Marine Corps were on duty in Europe, naval medical officers were with them with all equipment needed. The personnel of the Medical Corps increased from 353 doctors to 3,093; from 34 to 485 dentists; woman nurses from 160 to 1,713; members of the Hospital Corps from 1,585 to 16,564. Into the Medical Reserve came many of the ablest men in the profession. To the regulars and the reserves, the woman nurses and the hospital corps, went out the gratitude of the men wounded and ill to whom they administered unselfishly. Private John C. Geiger, a Marine, who lost his right foot as a result of a wound in Belleau Wood, voiced the feeling of all fighting men when he said:

> But I want to give credit to those hospital corps men of the Navy, who worked with the Marines. Those fellows deserve a gold medal or the highest award they can receive. Why, before we could reach our objective, they were right out on the field picking up and tagging the wounded. They didn't mind the danger and did their duty without protection of any kind. They were unarmed and could not shoot a German if they did run across one.

With the arrangements by which the Navy was to man the transports, a new and unexpected duty, it became necessary for the Medical Corps to expand its personnel and undertake a service that called for discretion and judgment as well as medical skill. Never in the history of troop movements have troops been so well taken care of, their health protected in every possible manner, the sanitary precautions provided, and such attention and elaborate provision made for the care of the sick and

wounded. The larger transports were indeed combined transports and hospital ships.

This transport work was taken over and performed entirely by the Medical Department of the Navy without extra appropriation and without expense to the Army. Every contingency was met. The provisions were ample for the care of sick troops in transit, and there were returned on naval transports, 151,649 Army sick, wounded and insane; 4,385 Navy; and 3,625 Marines from the expeditionary forces in France.

The Navy always put the man before the gun. If a member of the Navy did wrong, we sought to save him. Two thousand men, punished for offenses committed, were restored during the war, and most of them made good. This was possible by the restoration of morale through the Mutual Welfare League organized in naval prisons. It was an experiment that contravened all former military methods, and was inaugurated by Thomas Mott Osborne. Desiring to substitute modern penology for the methods in vogue, I requested Mr. Osborne to become head of the naval prison, and he was commissioned as lieutenant commander in the Reserves. In the League he gave a large measure of self government to prisoners. He used discipline as a means of helping young men to find themselves, and its success was most encouraging. Too much honor cannot be given him.

"Treat men as pawns and nine-pins," said Emerson, "and you shall suffer as well as they. If you leave out their heart you shall lose your own." It was that spirit, as well as the disuse of bread and water and solitary confinement and other ancient punishments, which made naval discipline the pattern for dealing with military offenders.

There was no "hard boiled" discipline tolerated in the Navy. Courts-martial were reviewed in a spirit of meting out justice, with consideration and discrimination, as well as mercy. Admiral George R. Clark, Judge Advocate General during most of the war, set new standards of military court procedure and lessened the rigors of punishment.

CHAPTER XXXIV

FIGHTING THE PROFITEERS

MANY MILLIONS SAVED BY REFUSING TO PAY EXORBITANT PRICES—"NAVY ORDER" PREVENTED EXTORTION—OVER THREE BILLION DOLLARS EXPENDED WITH NEVER A HINT OF GRAFT OR EXTRAVAGANCE—COMPETITION ADHERED TO IN WAR—FEEDING AND CLOTHING 500,000 MEN A BIG TASK, ACCOMPLISHED WITH SIGNAL SUCCESS—SAVING IN HUGE SHORE CONSTRUCTION.

THE Navy spent over three billion dollars for war purpose without a suggestion of extravagance or graft. To be exact, Congress appropriated $3,692,354,324.71. Of the amount $334,360,000 were returned to the Treasury, in February, 1919, and additional sums later by the sale of excess supplies and vessels that were no longer needed.

The rule of the Department, "A dollar's worth of Navy for every dollar spent," was adhered to in war as well as in peace. Early in 1917 steel was contracted for at 2.90 for Navy ships when the price was soaring in the market. Coal and oil and copper were purchased at reasonable prices or commandeered. Manufacturers of torpedoes and smokeless powder and other makers of munitions were held to reasonable profits. Where munition or supply dealers wished more than a fair profit, a "Navy Order" was placed.

The history of the "Navy Order" should be told, for it was the weapon that saved the Navy from profiteering. Competition prevailed through the war in all purchases except where the supply was inadequate for war necessities. In some cases the exigency of war demanded commandeering orders. Such orders were sometimes required because excessive prices were quoted, but often because the only private concerns which could manufacture the article needed were under contract for all their output. If they furnished the government of their own will, they were liable to the parties who had contracted for their product.

In such instances, a commandeering order was necessary both to obtain a war necessity and to protect the manufacturers.

In the naval appropriation act a provision was early inserted, drawn by Chairman Padgett, giving the power, when agreement could not be reached as to the price for something essential, to commandeer it—whether ships or land or munitions or supplies—and pay 75 per cent of the appraisement, leaving to the owner the right to contest in the courts the reasonableness of the compensation so fixed. That provision later became applicable to all war agencies of Government. It was not often invoked. The knowledge that the power was there and the declaration by the Secretary of the Navy that he would invoke it when any excessive price was demanded, and its use in some notable instances, made profiteering on the Navy not easy, and it was seldom undertaken.

"Certain coal operators are demanding excessive prices for coal," said an officer of the Supply Department when coal was necessary to bring back soldiers and munitions from Europe and carry on naval operations.

"Place a Navy Order" was the direction, and the Navy secured its coal from mines that produced Navy coal at prices that were not excessive.

At another time some oil operators, while selling oil to foreign ships, were refusing to deliver any oil to our ships on a naval order.

"What shall we do?" asked the officer in charge.

"Order the Marines to seize the oil," was the direction.

The Marines had the reputation for carrying out orders. It was not necessary for them to take the oil by force, but they were ready to do it if the oil had not been furnished otherwise.

These two cases were exceptional and they occurred after the armistice. As a rule, manufacturers and business men and bankers, as well as farmers and mechanics, showed from the moment war began that they, like our soldiers and sailors, had forgotten all selfish interests, all class interests of every kind. While the fighting men in the field gave the world a new conception of democracy, men of affairs were given the opportunity which, with few exceptions, they embraced, of showing to the world that the American's idea of his money, like his idea of

his life, was something which was to be freely and ungrudgingly given for his ideals and his country whenever his country called.

One of the early supplies that had to be husbanded was coal. At a conference of coal operators held in Washington in the spring of 1917, an agreement was made for Navy coal at reasonable prices, all operators to furnish their fair proportion to meet the needs.

In 1916 a board of officers in the Navy Department was named which was an important step in preparedness. Its duties were to get together at frequent intervals, to compare notes, to place on record probable needs and then to find out definitely where the necessary supplies could be obtained, in what quantities and how soon. Its work was most helpful in securing active coöperation all along the line and also in pointing the path—in a very modest way—toward the successful accomplishment of the task which was soon to be faced by the War Industries Board. This commodity-section plan, according to which the War Industries Board effected its own first successful internal organization, originated for naval uses in the Bureau of Supplies and Accounts, and, while the War Industries Board rendered most useful and invaluable service to the Navy, such help as was received related solely to priorities and to items of supplies and services of which there was a shortage. So long as supply exceeded or equalled demand and the usual orderly processes of business could consequently function, the Navy's long-established methods of procedure stood the test of war unchanged and unscathed.

The Navy, as did all other war agencies, leaned upon the War Industries Board which, by priority orders, saw that war material was furnished where most needed. Admiral Frank F. Fletcher was the Navy's representative on the Board. He showed the same ability in that important position which he had demonstrated when commander-in-chief of the Atlantic Fleet.

The War Industries Board, which rendered invaluable service, was made up of men who won national approval by their masterful handling of the big tasks committed to them. Its membership was: Bernard M. Baruch, chairman; Andrew Legge, vice-chairman; Robert S. Brookings, Hugh Frayne, Rear Admiral F. F. Fletcher, Brigadier General Hugh S. Johnson,

Judge Edwin B. Parker, George N. Peek, J. L. Replogle, L. L. Summers; H. P. Ingels, secretary; Albert C. Ritchie, general counsel; Herbert Bayard Swope, associate member of the board, assistant to chairman. Admiral C. J. Peoples was the Navy representative on priorities.

All supplies for the Navy, except such as were regulated by priority orders, were obtained throughout the war by formal contracts entered into after the widest possible public competition in the open market, the only restriction being that—as required by Section 3722 of the Revised Statutes of the United States—no person was allowed to bid unless he was a manufacturer or regular dealer.

Throughout the war, all formalities attendant upon the opening of bids were strictly adhered to. The proposals were opened every day—sometimes far into the night—and read out publicly, each bidder having ample opportunity to know his competitors' offers and also to be sure that his own were not overlooked. Even in the few cases where military secrecy was obligatory, there was still genuine competition. The eight bidders, for instance, on the mines for the North Sea Barrage were invited to meet each other and the purchasing officials in a locked and guarded room, even these confidential bids being strictly competitive.

The idea in all business dealings by the Navy was that every single transaction—indeed every part of every transaction—must not only be right but look right.

It is scarcely to be wondered at that by following this rule and also by giving prompt inspections and making immediate payments, the Navy throughout the war maintained most cordial relations with a business public which well knew that every contract was awarded to the lowest responsible bidder whose goods were up to the standard required by specifications and fit for the use for which they were intended. It was largely for this reason that the purchasing machinery was able to expand so enormously without confusion or delay. In one day during the war the purchases amounted to over $30,000,000, as compared with $19,000,000 during the heaviest pre-war year.

Looking back at it now, the mere suggestion of waiving competition—and thereby striking at the very foundation of the system—brings a smile of incredulity. But it was no joke at

the time. Scarcely had war been declared when requests came from a number of quarters for authority "to cut red tape" by doing away with competition, the argument being advanced that deliveries could thereby be expedited and important work accelerated. The idea was not easy to suppress, because its many advocates really believed they were right and insisted upon convincing superior authority. The answer was that competition was bound to speed things up rather than retard them and that, in any event, the responsible officials in Washington had given the matter due consideration and decided definitely and finally that competition must continue uninterruptedly, as to everything except where the demand so largely exceeded the supply as to compel priority orders.

The record of the commissary branch—and this applies to the hundreds of thousands of soldiers transported overseas and back as well as the half-million men within the Navy itself—was one of unqualified success from first to last and one of which the service has good reason to be proud. Never were men in uniform so well fed or was so much attention paid to a balanced and abundant ration. "Only the best (with no substitute said to be 'equally as good'), is good enough for our fighting men," was the motto of Rear Admiral Samuel McGowan, Chief of the Bureau of Supplies and Accounts, and his capable assistants, who took the greatest pride in seeing that men in the service never even knew, except by reading in the papers, that Government restriction was put upon the quantity and kind of food for civilians.

With respect to the forwarding of supplies of every description to the forces abroad, an intra-bureau order issued by Admiral McGowan in July, 1917, directed that every wish of the senior naval officer in European waters should be complied with on the same day that it became known—indeed that the discretion vested in the Chief of the Bureau of Supplies was already exercised when the needs of European forces were made known.

When the armistice was signed and demobilization followed, there was on hand a quantity of supplies in excess of prospective needs. The same supply officers, who had so capably provided for the Navy's wants during hostilities, promptly inaugurated

a selling campaign; and, on the first $70,000,000 worth of surplus thus disposed of, the Government realized a net profit of more than three millions.

Throughout the entire ordeal—preparation, operation, demobilization—the Navy's business organization functioned in all its various branches with full one hundred per cent effectiveness. So much so, in fact, that an investigating sub-committee from the House Committee on Naval Affairs officially reported to Congress that the Bureau of Supplies and Accounts "has won and well deserves a nation-wide reputation for business efficiency."

In appreciation of the service rendered by Admiral McGowan, Congress passed an act authorizing his retirement earlier than the usual time prescribed. This recognition was limited in its terms, applicable only to the Paymaster General, the Surgeon General and the Chief Naval Constructor. And no special distinction was ever more deserved.

Sound business principles were adhered to when it became necessary to give navy orders and provide funds for enlargement or construction of plants. Reference has been made to the methods of securing munitions of all characters. When it was necessary to take over an optical plant, for example, expert ordnance officers carried on its operation without injury to the rights of its owners, and expert accountants kept all transactions in accordance with the most approved business practice.

Most of the great construction was done under contract, as for example the giant armor plate and projectile plant at Charleston, W. Va., and the big dry-docks at Philadelphia and at Norfolk.

When the demand for new and larger training stations and other shore establishments, which ran into hundreds of millions of dollars, made it impossible to secure fixed price contracts, the supervision of the work was so efficient in the few cost-plus contracts that the cost was less than if undertaken under contract at a fixed price. This was notably true of the two mammoth office buildings occupied by the Navy Department and certain divisions of the War Department. The story of these two buildings—the largest office structures in the world—is interesting. The need for more space by the two war departments of

A GENERAL VIEW OF BANTRY BAY

At Berehaven, in Bantry Bay, the Americans maintained a large submarine base.

A CLOSE-UP VIEW OF AMERICAN "SUBS" AT BEREHAVEN

RODMAN AND BEATTY

Rear Admiral Hugh Rodman, who commanded the American battle squadron in the North Sea, and Admiral, the Earl Beatty, commander-in-chief of the British Grand Fleet.

the Government was recognized, even after temporary modern structures had been completed. Congress was asked for relief, and plans were presented. The Navy urged upon the Chairman of the House Appropriations Committee the construction of fireproof concrete buildings instead of the flimsy wooden fire-traps built in the hurry of the outbreak of the war. The suggestion met with favor, and the Navy was authorized to proceed with the construction of both buildings, the one for the Army as well as the one for the Navy. Under the direction of Captain A. L. Parsons, U. S. N., these structures were completed within five months at a price lower than the sums estimated by most contractors. They stand today as the best arranged office buildings in Washington, a monument to naval business methods and construction efficiency and to the wisdom of Congress.

The vast shore construction program, involving more than $300,000,000, was carried out with the greatest energy and efficiency by the Bureau of Yards and Docks, under the direction, first, of Admiral F. R. Harris and, later, of Admiral Charles W. Parks. The civil engineers, permanent and reserve, who directed shore construction in this country and in Europe, more than measured up to war demands.

The Board of Compensation, of which Admiral Washington Capps was made chairman, rendered service beyond computation in protecting the government in all "Navy order" contracts. Millions of dollars were saved by the thoroughness and efficiency with which this important board performed its manifold and difficult duties.

The only criticism of the Navy voiced during the war was that it was too insistent upon holding on to peace-time competition and economies. One officer complained that I "held up an order for torpedoes." He was correct. It was held up long enough to secure a conference with the makers. By a few days' delay on one order, $5,000,000 was saved, and we always had an abundant supply. In one order for shells $200,000 was saved. Such instances could be multiplied many times. Insistence upon competition, where possible, and strict inspection in other cases, enabled the Navy to close the war with the assurance that naval expenditures were as free from extravagance as they were untainted by graft or favoritism.

CHAPTER XXXV

"SIRS, ALL IS WELL WITH THE FLEET"

TWO THOUSAND VESSELS IN SERVICE—200,000 MEN OVERSEAS OR TRANSPORTING TROOPS AND SUPPLIES ACROSS ATLANTIC—373 SHIPS, 81,000 OFFICERS AND MEN IN EUROPEAN FORCES—VISITS OF ROOSEVELT, BENSON, MAYO AND CONGRESSIONAL COMMITTEE—PERSHING'S TRIBUTE.

WITH more than two thousand vessels in service and 533,000 officers and men, the largest personnel ever possessed by any Navy, our naval operations in the World War literally belted the globe. Operating with the Allies from the Arctic to the Adriatic, from Corfu to the Azores, we manned and operated the vast fleet of American transports carrying troops, munitions and supplies across the Atlantic, and furnished man-of-war escort to protect them.

Patrolling our own coasts and the Western Atlantic, the Gulf of Mexico and the Caribbean Sea, our vessels also kept watch in South American waters and guarded the approaches to the Panama Canal. Our ships in South American waters, commanded by Admiral W. B. Caperton, coöperated with the naval forces of our sister republics and gave insurance against possible raiders and submarines. Ships under Caperton, the squadron under Anderson in the Caribbean and the Gulf of Mexico, and Mayo's ships further north maintained the patrol throughout the war on this side of the Atlantic.

Guarding against raiders and German activities in the Pacific, our operations extended from our west coast to Hawaii, Guam and the Philippines, and our vessels in the Orient cooperated with the Japanese and other Allied naval forces from Manila to Vladivostok. The destroyers sent from Cavite, which voyaged twelve thousand miles through the Straits, the Indian Ocean, the Red Sea and the Mediterranean, met at Gibraltar the forces from the other side of the world.

Eight hundred and thirty-four vessels and two hundred

thousand men of the United States Navy were either serving in European waters or engaged in transporting troops and supplies to Europe, before hostilities ended. This was more than twice as many ships and nearly three times as many officers and men as were in naval service before the war.

Four hundred vessels were assigned to the Naval Forces Operating in European Waters, 373 being present at the time of the armistice—70 destroyers, 5 gunboats, 5 Coast Guard cutters, 120 submarine chasers, 27 yachts, 12 submarines, 13 mine sweepers, 10 mine planters, 8 battleships, 3 cruisers, 16 tugs, 4 cross-channel transports, 55 vessels carrying coal for the army, 18 tenders and repair ships, and 7 vessels of miscellaneous types. In addition three Russian destroyers were manned by United States naval personnel. Eighty-one thousand officers and men of the Navy were in service in Europe. Thirty thousand Marines were sent overseas for service with the Army and 1,600 for naval duty ashore.

But that by no means covers all the service performed for the Allies and our own forces in Europe. The entire Cruiser and Transport Force, with its 83 vessels, 3,000 officers and 41,000 men; and the Naval Overseas Transportation Service, with 378 vessels in operation, manned by 4,692 officers and 29,175 men, were in trans-Atlantic service, carrying troops and supplies. Practically all the 384 merchant ships which had naval armed guards and navy guns were carrying food, materials and other articles to allied armies and peoples. Thirty thousand of the naval personnel were, at one time or another, engaged in this service. Thus, a total of 834 vessels and more than 200,000 officers and men of the Navy and Marine Corps were engaged either in European service or in trans-Atlantic service to and from Europe.

Our forces in Europe operated in forty-seven different localities, extending from the Arctic Ocean all the way around to the Adriatic Sea. The extent of our operations is seen from this list of the principal naval bases, and the United States naval vessels on duty at each of them on November 11, 1918:

Queenstown (2 tenders, 24 destroyers, 30 chasers, 3 tugs)..... 59
Berehaven (3 battleships, 1 tender, 7 submarines, 1 tug, 1 oiler).... 13

Brest (1 gunboat, 16 yachts, 3 tenders, 38 destroyers, 9 tugs, 1 station ship, 4 steam barges, 4 barges, 9 mine sweepers) 85
Cardiff (1 tender, 1 refrigerator hulk, 55 colliers) 57
Gibraltar (2 cruisers, 4 gunboats, 5 Coast Guard cutters, 9 yachts, 1 tender, 6 destroyers, 18 chasers) 45
Genoa (2 tugs) 2
Azores (2 yachts, 1 tender, 1 oiler, 2 mine sweepers, 5 submarines, 1 tug) 12
Grand Fleet (5 battleships) 5
Murmansk (1 cruiser, also 3 Russian destroyers) 1
Mine Force (1 tender, 10 mine layers, 2 mine sweepers) 13
Southampton (4 transports) 4
Plymouth (1 tender, 2 destroyers, 36 chasers) 39
Corfu (1 tender, 36 chasers) 37
Liverpool (1 oiler) 1

Naval aviation activities were almost as extensive as those of our ships, extending from England, Ireland and Northern France to eastern Italy. There were thirty aviation bases, the Northern Bombing Group considered as one base:

Ireland—Queenstown (2 stations, seaplane, and assembly and repair); Whiddy Island, Wexford, Lough Foyle, Berehaven.
England—Killingholme, Eastleigh.
France—Dunkirk, Northern Bombing Group; Treguier, L' Aber Vrach, Fromentine, St. Trojan, Arcachon, Pauillac, La Trinite, La Pallice, Moutchic, Paimboeuf, Rochefort, Gujan, Brest, Guipivas, Le Croisic, and Ile Tudy.
Italy—Lake Bolseno, Porto Corsini, Pescara.
Azores—Marine Corps aviators.

Two divisions of our submarines operated in European waters—seven at Berehaven, Ireland, with the *Bushnell* as tender, and five at the Azores. Twenty-one sightings of enemy submarines and four torpedo attacks were reported by the Berehaven division. The AL-2 (Lieutenant P. F. Foster, commanding) had a remarkable encounter on July 10, 1918. Shaken by a terrific explosion, evidently that of a torpedo, the AL-2 discovered the periscope of a submarine apparently injured and attempting to get to the surface. The only chance to get the U-boat was to ram it submerged, and the AL-2 executed a crash dive, which carried it down a hundred feet. It barely missed the German, who was trying to slip under the American submarine. Swinging around, the AL-2 started again after the enemy, which was trying to rise. But it never came to the surface. Radio calls from another U-boat were unanswered. The lost submarine was

the German U-B-65, known to be operating in that vicinity. "Known sunk," was the verdict of the British Admiralty, and for this the AL-2 was given the major part of the credit. Our submarines did excellent and faithful service, and proved their usefulness in that new and strange phase of undersea warfare where "sub hunts sub."

Our vessels in European waters were employed in so many regions that they did not operate together as one fleet, but constituted a "task force" of the Atlantic Fleet. In British waters our ships usually operated with British forces under the direction of British officers. Elsewhere they remained under the direction of American officers, always coöperating freely with Allied naval forces. At the United States Naval Headquarters at London there was a force of 1,200. The 200 commissioned personnel included a number of the ablest officers in the Navy, with Captain (later Rear Admiral) N. C. Twining as chief of staff, and Captain W. R. Sexton as assistant chief of staff. It embraced experts whose daily association with officers in the Admiralty, under the leadership of Admiral Sims, brought about complete understanding and perfect team-work. Those at the head of important divisions were:

Intelligence Department, Commander J. V. Babcock, who also acted as aid; Convoy Operations, Captain Byron A. Long; Anti-Submarine Section, Captain R. H. Leigh; Aviation, Captain H. I. Cone, and afterward, Lieutenant Commander W. A. Edwards; Personnel, Commander H. R. Stark; Communications, Lieutenant Commander E. G. Blakeslee; Material, Captain E. C. Tobey; Repairs, Captain S. F. Smith, and afterward, Naval Constructor L. B. McBride; Ordnance, Commander G. L. Schuyler, and afterward Commander T. A. Thomson; Medical Section, Captain F. L. Pleadwell, and afterward, Commander Edgar Thompson; Legal Section, Commander W. H. McGrann; Scientific Section, Professor H. A. Bumstead, Ph. D.

This large establishment in Grosvenor Gardens had been built up from the small beginning in 1917 when Admiral Sims, accompanied by his aid, arrived just after war was declared. Entrusted first with the duty of conferring with the British Admiralty and reporting the naval situation with his recommendations, Admiral Sims was soon designated as commander of our forces in European waters with the rank of vice admiral,

and before the armistice was promoted to admiral. Keeping in constant touch with the British and other Admiralties, representing our Navy upon the Allied Naval Council, the information he secured, with that furnished us by Allied naval officers stationed in Washington, enabled the Navy Department to keep pace with all naval activities, and his recommendations were taken into consideration in important decisions that were made. Serving with zeal and ability, he won the regard and confidence of his associates of the allied navies, and received high honors from European governments.

In addition to the daily exchange of messages between London headquarters and Washington, information from special Government missions, and the intimate intercourse of officers of all the Allied navies, high ranking officials of our Navy from time to time went to Europe for conferences and inspection of our forces and activities, among them Assistant Secretary Roosevelt and Admirals Benson, Mayo and Gleaves. The Assistant Secretary, going over in the destroyer *Dyer,* spent six weeks abroad in the summer of 1918. He had conferences with the Allied naval authorities in London, Paris and Rome, and inspected our bases and mine depots, and witnessed the work of laying the North Sea barrage. Reporting that our personnel there had done well under hazardous and difficult circumstances, he advised a like mine barrage across the strait of Otranto.

Admiral Benson, going abroad in 1917, took part in the organization of the Allied Naval Council, and urged a more vigorous offensive, which we had favored from our entrance into the war. Months before, Admiral Benson had prepared, and I had approved and sent to the British Admiralty, "proposed measures to prevent German submarines from operating against Allied commerce in the Atlantic," which pointed out the following courses which were open to us:

We may attempt to—

(a) Reduce the Heligoland region and close exits for submarines.

(b) Reduce the Zeebrugge region and close exits for submarines.

(c) Enter the Baltic and close exits for submarines from the Baltic bases.

(d) Prevent Danish and Dutch territory being used for submarine bases.

(e) Construct and maintain mine barriers about the Heligoland area.

(f) Construct and maintain a mine barrier in the Skagerrack or Kattegat.

(g) Construct and maintain mine barriers in the Zeebrugge region.

(h) Construct and maintain a mine barrier across the North Sea.

(i) Close Dover straits to submarines by a mine barrier and surface patrol.

These matters were discussed by Benson with officers of the British Admiralty, and the methods and the difficulties of carrying them out were considered. Speaking, sometime after the war, of the offensive plans he advocated, Benson said:

I think that the bases of the German submarines should have been attacked, and I so urged when the war was in progress; and one of my conferences with the British Admiralty in London in 1917 was to urge more active operations against the bases of the submarines. But it was an operation that had to be not only a concerted action, but the principal part of it would have been necessary to be taken by the Allies, we simply to add our part to it; and all during the summer of 1917, I urged active operations of that kind and could never understand why we did not get definite plans from the other side as to how such operation should be carried out.

While in London I agreed with Admiral Jellicoe on a plan, a very confidential plan, that was to be carried out later on, in which I not only volunteered to place our ships but insisted that our ships should be placed there.

During Benson's absence from Washington, Captain (later Admiral) W. V. Pratt in both 1917 and 1918 acted as Chief of Operations. In the discharge of that duty, as well as Assistant Chief of Operations, succeeding Captain Volney Chase, who died in the summer of 1917, Admiral Pratt demonstrated ability unsurpassed by any officer serving in any important position during the World war. When Captain Pratt later was ordered to sea, Admiral Josiah S. McKean, who had served with marked ability as Chief of Material during the war, became Acting Chief of Operations and added to his well-earned reputation.

Admiral Mayo, in his capacity of commander-in-chief of our ships in European as well as home waters, made an official visit to Europe in September, 1917, inspecting bases and forces, and conferring with naval leaders of Great Britain, France and Italy. He was on duty again in Europe in 1918. Attending the

Allied Naval Conference in London, he urged the construction of the North Sea Barrage, which was shortly afterwards approved.

Visiting the famous Dover Patrol, he witnessed a bombardment of Ostend by British monitors, and had the experience of being under enemy fire. The flotilla leader *Broke,* in which he embarked with Sir John Jellicoe, First Sea Lord of the Admiralty, and other British officers of high rank, flew the flags of both Mayo and Jellicoe.

The monitors, armed with 15-inch naval guns, were accompanied on these expeditions by spotting aircraft and destroyers. The party accompanied the *Terror.* Soon after she began to fire, the German shore batteries got the range. Firing with precision and accuracy, some of the German shells fell within a short distance of the *Broke.* Admiral Reginald Bacon gives this interesting account of the incident:

> On Tuesday, September 25th [1917], Sir John Jellicoe, Admiral Sir Henry Oliver, and Admiral Philpotts arrived at Dover and came with Admiral Mayo and his staff up the patrol line. It was a quaint experience for them. Half an hour after leaving Dunkirk in the *Broke* we lost sight of the shore. After an hour's steaming we sighted the *Terror* and destroyers in the open sea, and the motor-launches just starting their smoke-screen. Nothing else was in sight except a small monitor five miles away right out at sea, burning her searchlight for an aiming mark. Really our visitors must have thought we were humbugging when the *Terror* opened fire and fired single rounds at fixed intervals.
>
> A few seconds afterwards while steaming about in the *Broke*—we had altered course three points—a splash came from a Tirpitz shell about 300 yards off. It fell very near the spot where we would have been if we had kept on our original course. I apologized to the American Chief of the Staff for not having kept on and brought the shell nearer. His reply was quaintly American in humor:
>
> "Don't mention it, Admiral; by the time we get to New York that shell will have been close alongside right enough!"
>
> The result of the *Terror's* shooting was most successful, as all the rebuilding in the dockyard done by the Germans was again demolished. On October 19th, the *Terror* was torpedoed, and had to be docked. On the following day the *Soult* fired at Ostend and destroyed a high explosive magazine. One German craft was sunk, and two more damaged.

Upon his return, Admiral Mayo made detailed reports covering the entire naval situation, with important recommendations

as to plans and measures. When war began it was expected that the time would come when the entire Atlantic Fleet would be sent abroad, and Admiral Mayo would command all our forces in the looked-for great naval battle with the German fleet. Our vessels in Europe were, therefore, considered our advance forces, a "task force" assigned to special duties until the whole fleet should be united for action. But the character of the war called for wide dispersion of its units, and it was not until after hostilities ended that they were reunited under the commander-in-chief, who was in command when the dreadnaughts sailed from Brest in December, 1918.

No navies in all history ever worked together in such close coöperation as did ours with the British, French and Italians. The cordial relations between the civilian populations, as well as the naval personnel, will be a lasting tie. I wish it were possible to put on record the sentiments expressed, the appreciation felt by all Americans in the Navy for the gracious courtesies and friendly offices shown to our men serving a common cause far from their homes. The one regrettable incident at Cork, where an unruly element attacked some of our sailors, was recognized as an exception. It was confined to the few engaged in the trouble, the people of that city and country having no relation to it and not affected by it in their feeling of friendship for our sailors and our country. It left no resentment towards the great Irish people, who received us with open arms and showed hospitality and cordiality towards our forces domiciled in that country.

One of the services which the people of Lille, France, will long remember is the voluntary act of men of the Navy in turning carpenters for the time, and building with their own hands scores of houses for the homeless people. That act, together with the generous gift by American sailors of their own rations to needy peoples, illustrates the spirit that actuated our men. At one place, so moved were they by the lack of food for women and children, the sailors denied themselves to such an extent that the captain was forced to issue an order limiting their generosity to prevent a shortage of food for the sustenance of the crew.

Cardiff does not bulk large on the war maps. Mention of it recalls no such adventure as at Zeebrugge, no such achieve-

ment as laying the mine-barrage in the North Sea, or sinking of submarines at Durazzo or on the high seas. But it spelled coal for our forces, and meant hard work and called for efficient management. The limited number of colliers, the time for making voyages to American coal fields, and the hazard from U-boats suggested obtaining coal from Wales for the needs of the army in France. The Army requested the Navy to release colliers for that service, and at first to operate twenty "lake" and other chartered boats and undertake the carrying of coal from Great Britain to supplement the steady flow from America. Admiral Philip Andrews, with headquarters at Cardiff, directed this work, which required a naval personnel of 4,101, operated 65 ships, and delivered 30,000 to 45,000 tons of coal each month.

There is no glamour about the work of repairing ships. Even in peace times it is a hard overalls job, but our nine European bases with eleven repair ships and tenders, kept our ships in condition. If I were a poet I would immortalize the skilled men, working in the dark, often flat on their backs, to keep our ships fit and to repair the ravages of U-boat attacks. Not counting the 500 ships going and coming from the United States to Europe, often calling for first aid, we had nearly 400 ships on duty in European waters. Though taxed by their own needs, the facilities of our Allies were freely at our disposal, but the fact that it was possible to make our forces so nearly self-sustaining is a high tribute to the officers and men charged with that duty. Allied navies expressed admiration for the ability of a ship's force to do much of their own repairing, and marvelled at the efficiency of the repair ships—the *Melville, Dixie, Panther, Prometheus, Bridgeport, Black Hawk.*

Our own Shipping Board voiced its thanks for naval assistance abroad as well as at home. In fact, in all ship construction and repair work as well as plans for operation and navigation undertaken by that organization the Navy furnished constructors and other experts, and was ready upon call with its entire facilities.

Little has been heard of the *Scorpion,* which was interned in Turkish waters during the war. The crew of that ship, whose base had long been at Constantinople, protected the American and British embassies, one regular duty of the vessel being to act

as despatch boat to our Ambassador to Turkey. After America entered the war, some of them, eager to get into the fray, made their escape over land and joined the American forces in France.

From the outbreak of the European conflict the *Scorpion's* men had a "front seat at the show," and witnessed many interesting sights. From the deck of their ship they saw the thrilling finish of the race of the German cruisers *Goeben* and *Breslau,* which made their sensational escape from British pursuers and then interned in the harbor of Constantinople. They saw the Teutonic crews of the erstwhile ships of the Germany Navy, hastily doffing their German caps and donning Moslem fezzes to camouflage their nationality, as the Turkish flag was hoisted to the mastheads. They observed, from their point of vantage, the gallant sweep of the harbor by a British submarine which bobbed up in the Bosporus as the Turks were preparing to send reinforcements to Gallipoli, torpedoed a Turkish vessel at its dock, and caused such consternation that the Turks, at the quays ready to sail with 40,000 troops, did not dare venture out with their transports. One single daring British submarine caused all the troops to be disembarked, and the sea expedition to the Dardanelles was abandoned.

The "Scorpions," as they called themselves, brought one story home with them which, if verified, is worthy of the best French epic. The Turks, as the story was told in Constantinople, captured a French submarine, the *Turquoise.* Not one of the captors who boarded the ship understood how to operate its delicate mechanism. Therefore, the French engineers were ordered to start the engines. Nothing loath, the orders were obeyed. The sub dived, carrying with it Turkish captors and French engineers, never to return. Whether or not that particular act can be confirmed, the war produced many men of the navies with the spirit which the incident illustrates.

The *Scorpion* was truly a ship of mercy. First, under the direction of Ambassador Morgenthau and afterwards of Ambassador Elkus, it carried hundreds of refugees to places of safety, was the almoner of many in distress and gave asylum to Americans, who were heartened in that harbor, crowded with ships carrying the flags of many nations, to see the glorious Stars and Stripes floating from the mainmast.

No story of the Navy's preparedness and efficiency would be complete without recognition of the wisdom of the Council of National Defense, authorized by Congress and appointed by the President in 1916. That Council had large responsibility, and measured up to its great duties before and during the war. The Council was thus constituted: Secretary of War Newton D. Baker, Secretary of the Navy Josephus Daniels, Secretary of the Interior Franklin K. Lane, Secretary of Agriculture David F. Houston, Secretary of Commerce William C. Redfield, Secretary of Labor William B. Wilson.

The Advisory Commission of the Council was composed of these men: Daniel Willard, Howard E. Coffin, Julius Rosenwald, Bernard M. Baruch, Dr. Hollis Godfrey, Samuel Gompers, Dr. Franklin Martin, Walter S. Gifford, director, Grosvenor B. Clarkson, secretary.

Eight months before the Armistice, March 11, 1918, the House Sub-Committee, composed of men of both parties—W. B. Oliver, chairman, W. W. Venable, Adam B. Littlepage, James C. Wilson, Fred A. Britten, John A. Peters and Frederick C. Hicks—which had made a thorough investigation of the Navy and naval administration, unanimously reported:

First. All appropriations have been expended or obligated with judgment, caution and economy, when you consider that haste was necessary to bring results and abnormal conditions obtained in reference to all problems of production or operations.

Second. The Navy, with limited personnel and material, was suddenly called to face many difficult and untried problems in sea warfare, and has met the situation with rare skill, ingenuity, and dispatch and a high degree of success.

Third. The efficiency of the Navy's prewar organization, the readiness and fitness of its men and ships for the difficult and arduous tasks imposed by war were early put to the acid test and thus far in no way have they been found wanting, and we feel that the past twelve months presents for the Navy a remarkable record of achievement, of steadily increasing power in both personnel and material, of rapidly expanding resources, and of well-matured plans for the future, whether the war be of long or short duration.

They could say at the close of hostilities, as they said then: "Sirs, all is well with the fleet."

The immense scope and signal success of our operations in Europe surprised even those familiar with the Navy, and the

great work of the war. Leading members of the House Committee on Naval Affairs—Chairman Lemuel P. Padgett, Representative Thomas S. Butler, the present Chairman, and Representatives Daniel J. Riordan, Walter L. Hensley, John R. Connelly, William B. Oliver, William W. Venable, James C. Wilson, William J. Browning, John R. Farr, John A. Peters, Frederick C. Hicks and Sydney A. Mudd—in July and August, 1918, made an inspection of our naval activities in Europe. Chairman Padgett, for the committee, on his return, said:

> The magnitude of our naval operations overseas, on the water and in the air, reflects credit upon the American people, and commands the respect and admiration of our Allies. When the war is over and the full history of our naval operations abroad may be given in detail, it will be a source of pride and honor to the American people, and the fidelity, patriotism and devotion of our naval officers and enlisted men, embracing as a part of the Navy the Marine Corps officers and men, will form a bright part in the world's history. * * *

The record speaks for itself. "Hindsight is better than foresight," and if it was to be done over again, the Navy, with its war experience, might do it better. But when all is said as to errors and achievements, this is the imperishable record:

The Navy performed successfully every task with which it was entrusted. In not one did it fail.

If it made mistakes—(and some were made)—not one of them had any serious or disastrous result.

If there were delays—(and there were some unavoidable ones)—not one of them had any material effect upon the trend or duration of the war.

If all the criticisms, of whatever kind or character, that have been made be lumped together, they would not tilt the scales one degree, if balanced against the Navy's achievements.

After the war was all over and the men were returning home, with time and opportunity to assess the value of the service rendered, General John J. Pershing, in command of the American Expeditionary Forces, wrote on April 21, 1919:

> We fully realize that had it not been for the Navy, who kept watch and guard night and day over our transport fleet, the American effort in France would never have been successful. The Navy's assistance was whole-hearted and arduous, and was always given in a most generous spirit of coöperation.

CHAPTER XXXVI

AFTER THE ARMISTICE

NAVAL DIPLOMACY PREVENTED CLASH IN FORMER AUSTRIAN TERRITORY AND STABILIZED CONDITIONS IN DISTURBED AREAS—ANDREWS IN THE ADRIATIC—BRISTOL AT CONSTANTINOPLE—MC CULLY'S CONFIDENTIAL MISSION TO RUSSIA—MISSIONS OF ROOSEVELT AND BENSON—SHIPS AND MEN SERVED AS ALMONERS TO THE STARVING.

MEN in the fighting line were full of solemn thanksgiving the day the armistice was signed. At home we built bonfires and rejoiced. In Paris the celebration was a jubilee. It meant home to the Americans, with eyes turned toward our shores, coming back to firesides with the sense of a hard duty finished with honor.

Much has been heard since November 11, 1918, of regret that war was not continued until Berlin was captured. There was no such feeling on the front line on that glad day in November. The Allies could have gone on to Berlin, but the victory would have been no greater, only costlier in lives. Those who think that the troops should have been ordered "On to Berlin," instead of accepting the victory through the terms of the armistice, ought to recall the statement by Marshal Foch. When the terms had been drawn up, one of the American Peace Commissioners asked General Foch whether he would rather the Germans would reject or accept the armistice that had been drawn up. The commander of the Allied armies answered:

> The only aim of war is to obtain results. If the Germans sign an armistice on the general lines we have just determined we shall have obtained the result we seek. Our aims being accomplished, no one has the right to shed another drop of blood.

But the armistice did not end naval operations in Europe. It changed them and lessened the number of ships and men

required. The terms of the armistice were to be carried out. The Second Division of the American Expeditionary Forces, commanded by General Lejeune, now head of the Marine Corps, composed of men of the Army and the Marine Corps, was sent to Germany as part of the Army of Occupation.

The starving had to be fed, and the Americans alone had the food and the organization. Everywhere in Europe there was the reaction from long strain. Having put our hands to the plow, we could not turn back until stable conditions were restored. And there were problems more difficult than those confronted in war.

When I reached Paris in March, 1919, the conditions in the Adriatic had reached an acute state. Vice-Admiral Niblack, the senior Allied officer charged with carrying out the armistice agreements on the Adriatic, came to Paris, and outlined to me the imminence of such clashes as later occurred at Trau, and such *coups* as that of D'Annunzio at Fiume, unless the authority of the Allied Council was promptly invoked. He had recently succeeded Rear Admiral W. H. G. Bullard on the Adriatic Mission. Before leaving Spalato, where he maintained headquarters, Admiral Niblack, in concert with other Allied commanders, had established a shore patrol, because of the fear of an outbreak. By the terms of the armistice, an Allied Naval Mission was created, and the Americans were given oversight over a stretch of ex-Austrian territory about three hundred miles long on the Dalmatian coast, embracing the ancient towns of Trau and Spalato. Admiral Niblack urged that the duties and rights of the Italians and Jugo-Slavs be set forth and their observance enforced.

It was a tense time. I had just returned from Rome as the guest of the Italian Navy, where American and Italian admirals exchanged views upon future naval problems and the future type of naval craft. In both nations there was the earnest desire to strengthen and cement the American and Italian friendship, jeopardized by the situation on the Dalmatian coast. I had scarcely finished my interview with Admiral Niblack, who felt the need of prompt action to prevent trouble in the Adriatic, when I received a visit from Count V. Macchi Cellere, the Italian Ambassador to the United States. He had felt the approaching

disagreement between Wilson and Orlando and had hurried to Paris to make an earnest effort to avert it. A charming gentleman, who loved his country passionately, he had a sincere attachment for the United States, where he was highly esteemed. He sensed that, if President Wilson did not approve Italy's claims on the Adriatic, the people of his country would feel deep disappointment. He foresaw that the sincere admiration of the Italians for President Wilson, as shown on his visit to Rome, would be turned into resentment. He was deeply moved in his appeal in advocacy of the position of his country, which he pressed with great earnestness. He believed in his soul that if the aspirations of the Jugo-Slavs were approved and they obtained important bases on the Adriatic, such settlement would prove disastrous to his country. Knowing my regard for Italy and his countrymen, and assured of my personal friendship, he felt free to speak without reserve. I never saw him after the break at Paris, but I knew his disappointment was poignant. When he died, not long afterwards, at Washington, I had the honor to send his body home on an American dreadnaught with distinguished escort, a token of American regard for Italy and its diplomatic representative.

When, during the command of Rear Admiral Philip Andrews, who served two years in charge of our naval forces in the Adriatic, as well as the American member of the Allied Armistice Commission, the shore patrol was removed, the duty of preserving order fell on the Serbs. Their central authority was light and order was not always preserved. Though there was no real authority for it, the American naval force was the real factor in maintaining order. Admiral Andrews came to be recognized by common consent as the controlling influence in that zone in the early days when authority was feeble. That country being ex-Austrian territory, some one did at times have to exercise authority. Our naval representative was looked upon to do this, and exercised it principally by moral force and fair dealing. His leadership was recognized, even demanded, by the Allies and by the Jugo-Slav government at Belgrade.

He promoted trade between the Italians and Jugo-Slavs, the first transaction being made on his flagship, the historic *Olym-*

FROM MANILA TO THE ADRIATIC

The Olympia, once Dewey's flagship at Manila, was flagship of Rear Admiral Philip Andrews (inset) in the Adriatic.

THE SCORPION, ONLY AMERICAN NAVAL VESSEL INTERNED DURING THE WAR

Interned by the Turks, she was later used as station ship at Constantinople by Rear Admiral Mark L. Bristol (inset), High Commissioner at Constantinople.

pia. That opened the door to better understanding. He was in direct touch with the governments at Rome and Belgrade and was in a very real sense the friendly mediator. His duties were mainly diplomatic, and he exercised the good offices of his country so impartially and fairly as to secure and maintain peace and business dealings. This was made possible, of course, through earnest friendly intervention, whose disinterested nature was soon recognized, and the judgment, ability, poise and courtesy of Admiral Andrews. In proof of his impartiality and the appreciation of both nations, he was decorated both at Belgrade and Rome.

It was only the wise and prompt action of Captain David F. Boyd, of our Navy, that saved the situation when Trau was captured by soldiers from the Italian Zone, September 23, 1920. They crossed the armistice line without Italian authority and surprised and captured the small Serbian guard. This imitation of D'Annunzio's *coup* was short-lived. Captain Boyd, after agreement with the Italian admiral, put the offending Italian army captain and soldiers in an Italian motor boat, and turned them over to an Italian naval officer. The situation was so acute that Captain Boyd's service called for this high commendation from Vice Admiral Knapp: "The whole affair was most creditably handled and the very prompt action of Captain Boyd, in my opinion, undoubtedly prevented a very serious incident which might have resulted in open warfare between Italians and Serbians." Admiral Andrews thought that, but for the action in securing the withdrawal of the Italians so promptly, "the Serbs would have killed them all, and a small war would have been started."

War between the other Allies and Italians was narrowly averted at Fiume at the time of the D'Annunzio *coup.* The French and British had troops ashore, and there were Allied ships in the harbor, Admiral Andrews having with him on his flagship Major General C. P. Summerall, U. S. A. The question was whether the Allied troops would drive out the D'Annunzio forces or withdraw. They were disinclined to withdraw. Admiral Andrews urged withdrawal on the ground that, as it was the Italian regulars who had let D'Annunzio's troops into the city, it was the duty of Italy to get them out and not the duty

of the Allies to make war in order to expel them. This course opened the way for continued Allied friendship after the passing of the storm.

Though he had no control on land, the American Admiral was looked to by the people for guidance. They not only respected him but he won their regard as he won the approval of the Allies and the plaudits of his countrymen. The children flocked about him. They had not seen sugar or sweets for four or five years. As he traveled about the country from Spalato, Admiral Andrews always took with him plenty of cakes of chocolate for the children. They welcomed the chocolate and as his car would go from place to place, the happy children would call out: "Here comes the Chocolate Admiral," in terms of gratitude and affection.

"At that time," wrote a navy officer, "President Wilson was venerated by the Jugo-Slavs. They were always appealing to him through Admiral Andrews. He was to them an idol, able and willing to redress all wrongs, and all powerful. The only way President Wilson was known to the children was as the owner of a chocolate factory, whose chocolate was dispensed by the Admiral as his agent."

The duties assigned the Navy in the Near East were largely diplomatic, though naval vessels carried on, and still carry on, the work of mercy begun by the Navy in 1914 when the *Tennessee* carried persecuted Jews and others from Turkey to places of safety. Our ships were employed in these waters, whenever occasion made it possible, in carrying food and clothing to suffering peoples. Rear Admiral Mark L. Bristol, in command of the naval forces in Turkish waters during the early days of transition, was appointed by the President of the United States, in August, 1919, as High Commissioner at Constantinople. The unsettled conditions and the fact that our country had recognized no government in Turkey made the selection of a naval officer the best agency for the protection of Americans and American interests, the hastening of stability, and helpfulness to those in dire need.

As naval commander in these important waters, Admiral Bristol maintained a system of communications, sometimes stationing vessels at various points as radio traffic ships, and

operated vessels on regular schedules for relief work, for transporting army officers and members of recognized philanthropic societies to ports where their duties demanded their presence, or where stores were needed for the immediate sustenance of the impoverished inhabitants. During the severe fighting in southern Russia, he aided in evacuating Americans, non-combatants and sick and wounded.

As High Commissioner, he performed the varied duties of an ambassador, commercial representative and shipping expert at Constantinople, where all roads meet and all nationalities struggle for trade and power. Like other American naval officers on duty in Europe since the armistice, he illustrated the best traditions of naval capacity by the wise performance of the varied diplomatic duties entrusted to them. They did this so well that Lord Palmerston's estimate of a British naval officer was proved to be true of American officers. "When I have a hard job to be done anywhere in the world, calling for a clear head and a steady hand," said Palmerston. "I send a captain of the Navy."

Conditions in Russia were chaotic and deplorable. Rear Admiral Newton A. McCully, who had first been naval attaché at Petrograd and afterwards in command of Naval Forces in Northern Russian Waters, was ordered to Southern Russia upon a confidential mission after the armistice. This was done at the request of the State Department. Admiral McCully speaks the Russian language like a native. He is trusted and esteemed by Russians and he reciprocates their regard. He was not accredited to any Russian government. His reports were invaluable in keeping the American authorities and the Allies acquainted with the rapidly changing conditions in that disturbed region in a period when practically no other accurate information could be obtained. In addition to that diplomatic duty, Admiral McCully was instrumental in safeguarding the lives of Americans, and in ameliorating the conditions of Russians and aiding in their evacuation. Upon his return to America, he brought with him half a dozen Russian children to whom he is giving a home and training—a beautiful evidence of his friendship to the country and his distress at the plight of its children.

The story of naval aid in north Russia, while not conspicuous, was a blessing in chaotic days and afforded protection and assistance in varied ways. The *Galveston* and *Chester* arrived in Archangel in April, 1919, with Brigadier General W. P. Richardson and a detachment of the 167th Railway Transportation troops to assist in the withdrawal of American forces. The *Des Moines,* the *Yankton,* the *Sacramento* and a number of eagle boats and sub-chasers came later, and in May the *Des Moines* managed to get through the ice at the cost of a few hundred feet of copper sheathing. They did excellent service as despatch boats, and brought provisions and comforts and doctors.

All American troops had been withdrawn from advanced positions, and all the troops, except a very small detachment, were withdrawn from Northern Russia in June. Then the withdrawal of naval ships began, the last one, the *Des Moines,* leaving in August, taking out the last of the Americans. Prior thereto, after our Ambassador, Hon. David R. Francis, had, even in illness, exhausted every effort to serve Russia and the world's peace, the *Olympia* gave him passage to England on his way home. This was only one of the many services of Dewey's flagship in the war. Dewey and the *Olympia* were the link between the Spanish-American and the World War. Under Dewey's leadership the plans for war with Germany were made before we entered the war. His old flagship was the ship of service during the war, of diplomacy in Europe after the war, particularly in the Adriatic, and was often the bearer of food to starving peoples.

The duty of almoner by America after the armistice endeared our country to all Europeans, particularly those in distress. The Navy not only transported and distributed supplies but also took over the repair and operation of the telegraph and telephone, the operation of wireless, and made possible communication by trained radio men and other naval personnel. "I do not see how we could have carried on the work without the wonderful help of the Navy," said Mr. Herbert Hoover, who was telling me in Paris in March, 1919, of the splendid service of navy men in the countries devastated by war.

In December, 1920, Russian refugees began arriving at Cat-

taro in the lower Adriatic. There was no one to give them immediate help but the Americans. Admiral Andrews sent the *Olympia* and wired to Paris for doctors, money and nurses, and hurried them to the place by fast destroyers. They fed and organized the first 8,000. There was no food but ours. There were some soldiers, but most of the refugees were old men and women and children. Many died coming from Constantinople. Fortunately the American Red Cross was near, and it is safe to say that but for the American Navy and the American Red Cross, there would have been thousands of deaths from typhus alone and that disease would have spread all over the Balkans and Central Europe.

In November, 1918, Assistant Secretary Franklin D. Roosevelt went to Europe to expedite settlements with Allied governments and speed up the return of American ships and men. During the war we had agreements with them not reduced to writing, and these called for adjustment. Mr. Roosevelt was accompanied by Assistant Attorney General Thomas J. Spellacy and Commander J. M. Hancock, of the Supply Corps. All negotiations were satisfactorily completed, demobilization hastened, and excess material sold or salvaged. The most important of these transactions was perfecting the sale to the French Government of the high power radio station built in France by our Navy and named for Lafayette.

In October, 1918, Admiral Benson, making his second official visit to Europe during the war, sailed for France to attend sessions of the Allied Naval Conference and to take part in the arrangements leading up to the armistice and the fixing of naval terms in that instrument. He remained until the following summer as the naval adviser to the American Peace Mission. With a competent staff, he was enabled to give information and advice to the President and the Peace Mission. Upon his arrival, Benson took his place as the American naval representative on the Allied Naval Council. Admiral Sims, who had served on the Council in the absence of Benson, having completed his duties at London, returned to the United States in the spring of 1919. He was succeeded by Rear Admiral Harry S. Knapp, who was later promoted to Vice Admiral. Upon his retirement, Admiral H. McL. P. Huse succeeded to the assignment, and in 1920

Vice Admiral Niblack became the commander of American forces in European waters.

In Paris in 1919 I held informal conferences with Admirals Benson, Knapp, Niblack, Griffin, Taylor, Earle and Long, and with representatives of Allied nations touching problems affecting the future naval programs of the nations. At that time the world believed that with the adoption of the peace treaty, naval and military policies would be radically changed. It was confidently expected that the countries would unite to reduce the burdens of armament which the war had shown menaced world peace.

Admiral A. S. Halstead, who had succeeded Admiral Wilson at Brest, supervised the naval duty of returning the soldiers, continuing on duty until embarkation had been completed. Other officers in all parts of Europe remained in connection with the shipping and the other tasks which the Navy was called upon to perform.

The last gigantic task had to do with the greatest American contribution to the war—the sweeping up of the mines planted in the North Sea as the effective barrier against the egress of submarines. This was a hazardous undertaking, involving the loss of men and ships, but fewer lives were lost than any had dared to hope. By November, 1919, the 89 ships assigned to that drab and dangerous duty, with their officers and men, were in home waters.

Thus the task of the Navy in the World War came to an end. The officers and men serving overseas had forged friendships with their comrades of the mist which will always gladden their lives. As they raised the "homeward bound" pennant, they were cheered by the consciousness of a great task well ended and by the thanks of grateful peoples for all they had done.

Coming in sight of the Statue of Liberty, its steady rays lighting their course, they found awaiting them the welcome reserved only for those who love liberty more than life.

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